

LIVE BIRTHS: STATE SUMMARY

LIVE BIRTHS

INTRODUCTION

Purpose of Surveillance

Birth certificates serve as legal records of birth and identification, and provide surveillance data used to monitor fertility trends, population composition and growth, and patterns in prenatal and postnatal conditions that affect the immediate and future health of newborns and mothers. Information monitored through birth surveillance includes adequacy of prenatal care, obstetric procedures, complications during delivery, method of delivery, and infant birthweight. Examination of surveillance data helps identify mothers and infants at high risk of poor outcome, so that research, educational efforts, and services can be effectively targeted to reduce this risk.

Source of Data: Certificate of Live Birth

The birth section of this report is based on live births that occurred to Louisiana residents during the 1996 calendar year. The *Certificate of Live Birth* is the source document for these data. All original birth certificates flow to the Vital Records Registry in New Orleans.

Data are recorded on birth certificates by birth attendants. Louisiana law requires that the birthing facility or attendants send the original birth record to the Vital Records Registry within fifteen days of birth, and that the identities of persons included in the birth registry be kept confidential.

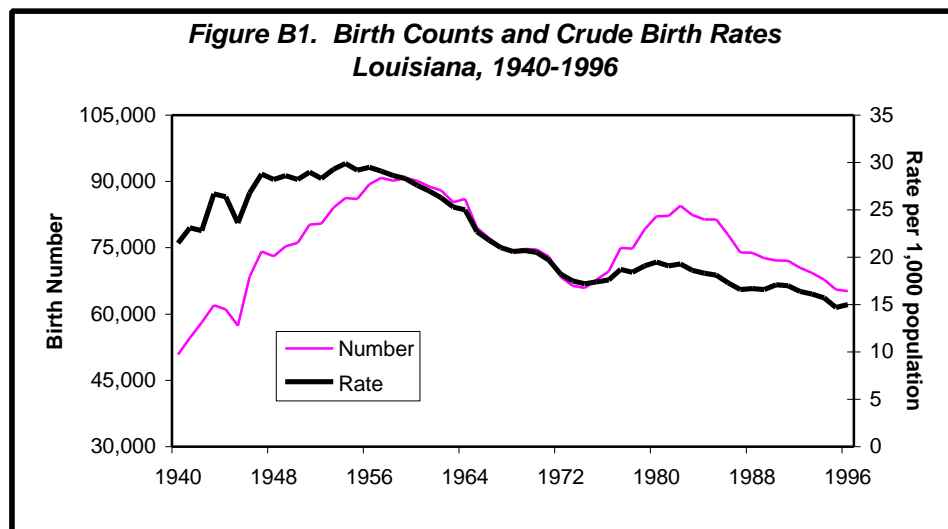
Unless otherwise noted, all statistics reported here are for births to Louisiana residents, regardless of the state in which the birth occurred. The Vital Statistics Cooperative Program, a nationwide system of information interchange among all states and territories, makes possible the reporting of out-of-state births to Louisiana residents.

As the result of the 1991 implementation of Louisiana's Electronic Birth Certificate (EBC) program, approximately 85% of all births are reported electronically by the hospital at which the birth occurred. Matching of infant death certificates with the corresponding birth certificates indicates that birth registration in Louisiana is approximately 97% complete.

BIRTH COUNTS AND RATES

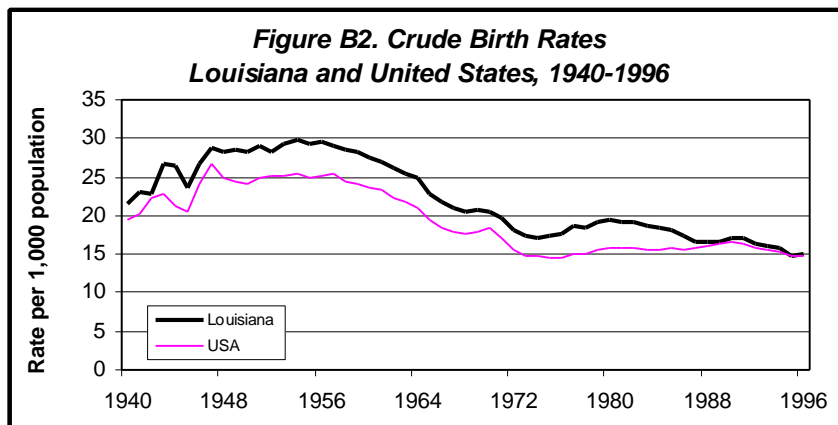
Birth Counts and Crude Birth Rates

- In 1996, there were 65,186 live births to Louisiana residents, a slight decrease from the 65,574 Louisiana resident births in 1995 (down 0.59%) (Figure B1, Table B1). At the national level there was a slight increase (0.39%) in the number of births between 1995 and 1996 (Figure B2, Table B1).
- Louisiana's 1996 crude birth rate was 15.0 live births per 1,000 population. This rate was similar to both the 1995 Louisiana rate (14.7) and the 1996 national rate (14.7) (Figure B1, Table B1).



The **crude birth rate** measures the number of live births in a population during a given period of time. It is calculated by dividing the number of live births in a population during one year by the total population, then multiplying the quotient by 1,000. The rate is expressed as the number of live births per 1,000 total population. Birth rates are affected by the number and age distribution of women of childbearing age. Because crude birth rates relate the number of live births to the total population in an area, without regard to the age or sex distribution of the population, they are useful in projecting population changes in the area.

- Louisiana's crude birth rate historically has been higher than the national birth rate, although it has mirrored the national birth rate pattern since the 1960s. **Since the 1980s, however, the state's rate has declined steadily, while the national rate has remained fairly stable. The trends have resulted in a convergence of the national and state rates during the 1990s** (Figure B2, Table B1).



Source: Louisiana State Center for Health Statistics, National Center for Health Statistics

Table B1. Birth Counts, Percent Changes, and Crude Birth Rates
Louisiana and United States, 1940-1996

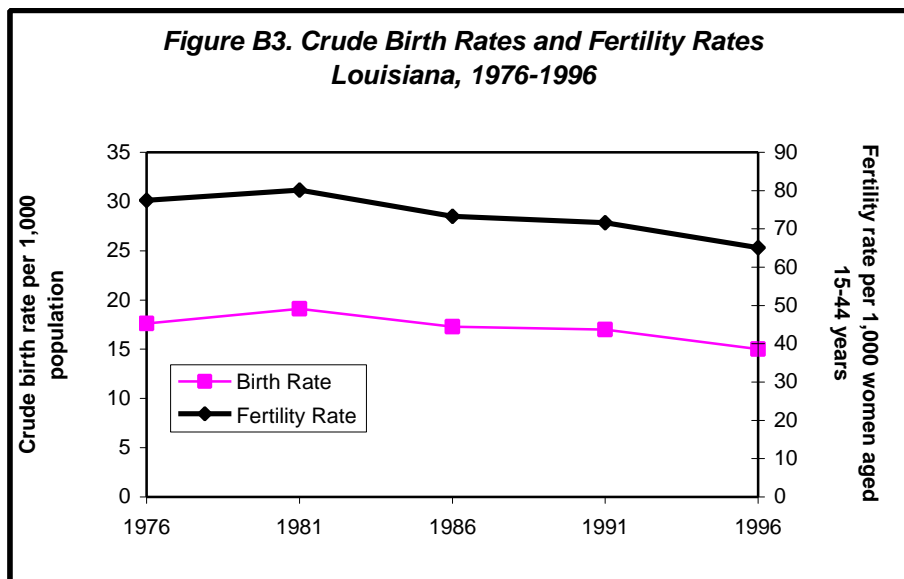
Year	Louisiana			United States		Year	Louisiana			United States	
	Number	% Change from Previous Year	Rate*	% Change from Previous Year	Rate*		Number	% Change from Previous Year	Rate*	% Change from Previous Year	Rate*
1940	50848	4.08%	21.5	3.77%	19.4	1969	74770	0.91%	20.7	2.82%	17.9
1941	54618	7.41%	23.1	5.63%	20.3	1970	74615	-0.21%	20.5	3.64%	18.4
1942	58093	6.36%	22.8	10.58%	22.2	1971	73014	-2.15%	19.7	-4.70%	17.2
1943	62005	6.73%	26.7	3.85%	22.7	1972	68340	-6.40%	18.2	-8.37%	15.6
1944	61050	-1.54%	26.4	-5.32%	21.2	1973	66413	-2.82%	17.5	-3.73%	14.8
1945	57363	-6.04%	23.6	-2.76%	20.4	1974	65880	-0.80%	17.2	0.73%	14.8
1946	68549	19.50%	26.8	19.35%	24.1	1975	67792	2.90%	17.4	-0.50%	14.6
1947	74166	8.19%	28.8	11.90%	26.6	1976	69678	2.78%	17.6	0.75%	14.6
1948	73104	-1.43%	28.2	-4.72%	24.9	1977	74989	7.62%	18.7	5.01%	15.1
1949	75302	3.01%	28.6	0.33%	24.5	1978	74831	-0.21%	18.4	0.20%	15.0
1950	76108	1.07%	28.2	-0.47%	24.1	1979	79183	5.82%	19.1	4.83%	15.6
1951	80256	5.45%	29.0	5.18%	24.9	1980	82114	3.70%	19.5	3.37%	15.9
1952	80476	0.27%	28.3	2.33%	25.1	1981	82167	0.06%	19.1	0.00%	15.8
1953	84108	4.51%	29.3	1.28%	25.1	1982	84531	2.88%	19.3	0.47%	15.9
1954	86225	2.52%	29.9	2.83%	25.3	1983	82416	-2.50%	18.6	1.41%	15.6
1955	86031	-0.22%	29.2	0.64%	25.0	1984	81428	-1.20%	18.3	-1.13%	15.6
1956	89333	3.84%	29.5	2.76%	25.2	1985	81401	-0.03%	18.1	0.83%	15.8
1957	90786	1.63%	29.1	2.14%	25.3	1986	77944	-4.25%	17.3	2.49%	15.6
1958	90175	-0.67%	28.6	-1.26%	24.5	1987	73952	-5.12%	16.6	-0.11%	15.7
1959	90814	0.71%	28.3	0.94%	24.2	1988	73887	-0.09%	16.7	1.41%	16.0
1960	90126	-0.76%	27.6	-0.66%	23.7	1989	72639	-1.69%	16.6	2.63%	16.4
1961	88892	-1.37%	27.0	0.25%	23.3	1990	72121	-0.71%	17.1	3.36%	16.7
1962	88005	-1.00%	26.3	-2.37%	22.4	1991	72080	-0.06%	17.0	2.90%	16.3
1963	85334	-3.04%	25.3	-1.66%	21.7	1992	70502	-2.19%	16.4	-1.14%	15.9
1964	86060	0.85%	25.0	-1.72%	21.1	1993	69328	-1.67%	16.1	-2.69%	15.5
1965	79533	-7.58%	22.7	-6.63%	19.4	1994	67802	-2.20%	15.7	-1.19%	15.2
1966	77223	-2.90%	21.8	-4.10%	18.4	1995	65574	-3.29%	14.7	-1.35%	14.8
1967	75199	-2.62%	21.0	-2.37%	17.8	1996	65186	-0.59%	15.0	0.39%	14.7
1968	74098	-1.46%	20.6	-0.55%	17.6						

Rate per 1,000 population

Source: Louisiana State Center for Health Statistics, National Center for Health Statistics

Fertility Rates

- Louisiana's 1996 fertility rate was **65.1 births per 1,000 women aged 15-44**. The United States' fertility rate in 1996 was 65.3 births per 1,000 women aged 15-44 (Figure B3, Table B2).
- As with the crude birth rate, Louisiana's **fertility rate has been declining since the 1980s** in both Louisiana and in the United States (Figure B3, Table B2).

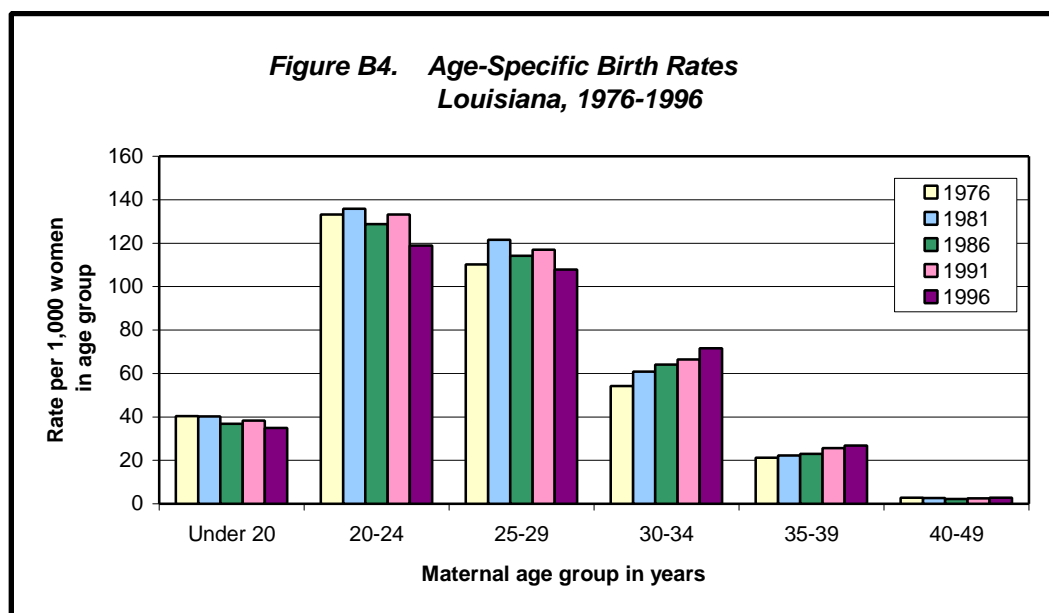


The **fertility rate** relates the total number of births (to women of all ages) in a population to the number of women most likely to bear children - those 15 through 44 years of age. The rate is calculated by dividing the total number of live births during one year by the population of women aged 15 through 44 years, then multiplying the quotient by 1,000. The rate is expressed as the number of live births per 1,000 women aged 15 through 44 years. Because they focus only on women in the prime childbearing years, fertility rates are more useful than crude birth rates in controlling for differences in age distribution among women who give birth. These rates are useful for comparisons of fertility among age, racial, and socioeconomic groups.

MATERNAL PROFILE

Age of Mother

- The youngest mother in Louisiana in 1996 was 10 years of age at the time of birth and the oldest mother was 49. There were seven births to Louisiana residents of unknown age.
- Although Louisiana's overall birth and fertility rates have declined since the 1980s, age-specific birth rates have increased for women aged 30-39, and have remained stable for women aged 40 and older. The decrease in overall rates has occurred mostly in women under the age of 30, suggesting a shift toward older women giving birth (Figure B4, Tables B2 and B3). This shift is comparable with the national trend in age-specific birth rates.



The **age-specific birth rate** measures the number of live births in a specific age group during a given period of time. The rate is calculated by dividing the number of births to mothers in a particular age group during one year by the total female population in that age group, then multiplying the quotient by 1,000. The age-specific birth rate is expressed as the number of live births per 1,000 women in that particular age group. Because childbearing occurs most often in the early adult years, a woman's age is a very important factor when examining birth trends. Age-specific birth rates make valid comparisons among age groups possible because the scope of each rate is limited to a narrow age range, thereby greatly reducing the effect that age might have on the number of births being described.

Table B2. Crude Birth Rates, Fertility Rates, and Age-Specific Birth Rates Louisiana, 1976-1996										
Year	Crude Birth Rate*	Fertility Rate**	Age-Specific Birth Rate* by Maternal Age Group							
			10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1976	17.6	77.5	2.2	76.2	133.1	110.1	54.2	21.1	5.4	0.3
1981	19.1	80.2	2.0	73.9	135.8	121.6	60.8	22.2	4.8	0.3
1986	17.3	73.3	2.4	68.0	128.7	114.3	64.1	23.0	4.0	0.2
1991	17.0	71.6	2.6	75.9	133.1	117.0	66.4	25.7	4.3	0.2
1996	15.0	65.1	2.2	66.6	118.9	107.8	71.6	26.8	5.1	0.2

*Rate per 1,000 population

**Rate per 1,000 women aged 15-44 years

*Rate per 1,000 women in age group

Birth Order

- **Between 1990 and 1996, Louisiana's first birth rate dropped 4%, from 27.8 to 26.7 first births per 1,000 women aged 15-44. During the same time period, the United States' rate dropped 7.6%, from 29.0 to 26.8 (Table B3).**
- **Since 1991, the first birth rate for teens aged 15-19 and for young adults aged 20-24 have dropped steadily, while rates for women in their thirties have risen steadily (Table B3).**

Table B3. First Birth Rates* by Maternal Age Louisiana and United States, 1990-1996									
Year	Maternal Age Group								
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	15-44	
								Louisiana	United States
1990	2.3	54.6	56.9	36.6	14.3	3.9	0.5	27.8	29.0
1991	2.5	55.4	56.6	35.7	13.2	3.7	0.5	27.4	28.3
1992	2.2	55.0	55.0	35.4	13.5	3.9	0.5	27.1	27.8
1993	2.3	56.0	55.3	34.8	14.2	4.0	0.6	27.2	27.5
1994	2.3	55.0	54.6	35.3	15.1	4.2	0.7	27.2	27.5
1995	1.9	53.3	52.6	36.6	15.8	4.4	0.7	27.0	27.3
1996	2.1	50.8	52.0	36.9	16.9	4.4	0.8	26.7	26.8

*First birth per 1,000 women in specified age group

Source: Louisiana State Center for Health Statistics

National Center for Health Statistics

The **first birth rate** measures the number of first births to mothers in a particular age group. The rate is calculated by dividing the number of first births to mothers in a particular age group by the total female population in that age group, then multiplying the quotient by 1,000. It is expressed as the number of births per 1,000 women in that age group. First birth rates are helpful in assessing changes over time in the age at which women begin bearing children.

Table B4 presents detailed counts of birth order by the age and race of the mother.

Table B4. Counts of Live Births by Birth Order, Maternal Age, and Maternal Race Louisiana, 1996														
Birth Order	Race	Total	Maternal Age Group									Percent of All Live Births	Mean Age of Mother	Median Age of Mother
			Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.			
All	All*	65186	376	11934	19001	16649	11570	4753	869	27	7	100.0	25.4	24.3
	White	37236	65	4939	9807	10991	7856	3037	527	10	4	57.1	26.4	25.6
	Black	26503	308	6849	8870	5218	3385	1543	315	12	3	40.7	24.0	22.1
1	All*	27146	367	9106	8303	5701	2733	788	140	5	3	41.6	22.8	21.5
	White	16229	65	4111	5028	4321	2035	556	108	3	2	24.9	24.0	22.9
	Black	10284	299	4871	3099	1192	595	198	28	1	1	15.8	20.8	19.0
2	All*	20596	7	2251	6382	6100	4228	1432	192	4	-	31.6	26.2	25.6
	White	12529	-	730	3333	4242	3108	976	139	1	-	19.2	27.3	26.8
	Black	7627	7	1504	2952	1705	1012	400	44	3	-	11.7	24.3	22.8
3	All*	10637	1	495	2907	3045	2750	1225	209	4	1	16.3	27.9	27.5
	White	5813	-	84	1154	1789	1838	826	119	2	1	8.9	29.2	28.8
	Black	4619	1	407	1717	1190	851	366	86	1	-	7.1	26.2	24.8
4	All*	3993	1	63	1014	1084	1047	653	125	6	-	6.1	29.0	28.6
	White	1783	-	7	235	463	603	401	71	3	-	2.7	30.9	30.8
	Black	2125	1	56	764	602	418	232	50	2	-	3.3	27.3	25.9
5	All*	1548	-	10	288	417	442	305	83	3	-	2.4	30.2	29.8
	White	517	-	2	35	113	174	156	37	-	-	0.8	32.4	32.6
	Black	984	-	8	253	295	245	137	43	3	-	1.5	28.9	27.8
6	All*	626	-	-	76	170	187	152	38	2	1	1.0	31.3	30.8
	White	185	-	-	8	43	52	63	18	-	1	0.3	33.1	33.0
	Black	424	-	-	68	125	132	81	17	1	-	0.7	30.3	29.8
7	All*	290	-	-	17	71	80	95	26	1	-	0.4	32.6	32.8
	White	69	-	-	2	8	20	28	10	1	-	0.1	34.9	35.5
	Black	212	-	-	15	62	57	62	16	-	-	0.3	31.8	31.7
8	All*	138	-	-	2	40	45	33	18	-	-	0.2	32.9	31.9
	White	30	-	-	-	6	9	9	6	-	-	0	34.0	34.5
	Black	105	-	-	2	33	36	22	12	-	-	0.2	32.5	31.7
9	All*	69	-	-	-	12	16	27	14	-	-	0.1	35.1	35.7
	White	16	-	-	-	1	1	8	6	-	-	0	37.7	37.8
	Black	51	-	-	-	11	14	18	8	-	-	0.1	34.3	34.9
10	All*	30	-	-	-	-	12	13	5	-	-	0	35.9	35.8
	White	8	-	-	-	-	1	3	4	-	-	0	39.1	39.0
	Black	21	-	-	-	-	11	9	1	-	-	0	34.6	33.9
11	All*	16	-	-	1	1	5	5	2	2	-	0	35.8	35.0
	White	3	-	-	1	-	-	1	1	-	-	0	33.7	39.0
	Black	12	-	-	-	1	5	4	1	1	-	0	35.4	34.7
12	All*	12	-	-	-	1	3	6	2	-	-	0	35.5	35.5
	White	1	-	-	-	-	-	1	-	-	-	0	36.0	36.0
	Black	11	-	-	-	1	3	5	2	-	-	0	35.5	35.5
13	All*	6	-	-	-	-	-	5	1	-	-	0	38.0	37.3
	White	-	-	-	-	-	-	-	-	-	-	-	-	-
	Black	6	-	-	-	-	-	5	1	-	-	0	38.0	37.3
14	All*	2	-	-	-	-	-	2	-	-	-	0	36.5	36.0
	White	-	-	-	-	-	-	-	-	-	-	-	-	-
	Black	2	-	-	-	-	-	2	-	-	-	0	36.5	36.0
15	All*	1	-	-	-	-	-	-	1	-	-	0	41.0	41.0
	White	-	-	-	-	-	-	-	-	-	-	-	-	-
	Black	1	-	-	-	-	-	-	1	-	-	0	41.0	41.0
16+	All*	5	-	-	-	-	3	-	2	-	-	0	35.8	32.8
	White	1	-	-	-	-	1	-	-	-	-	0	33.0	33.0
	Black	4	-	-	-	-	2	-	2	-	-	0	36.5	32.0
Unk.	All*	71	-	9	11	7	19	12	11	-	2	0.1	30.1	30.6
	White	52	-	5	11	5	14	9	8	-	-	0.1	30.0	30.6
	Black	15	-	3	-	1	4	2	3	-	2	0	31.5	30.8

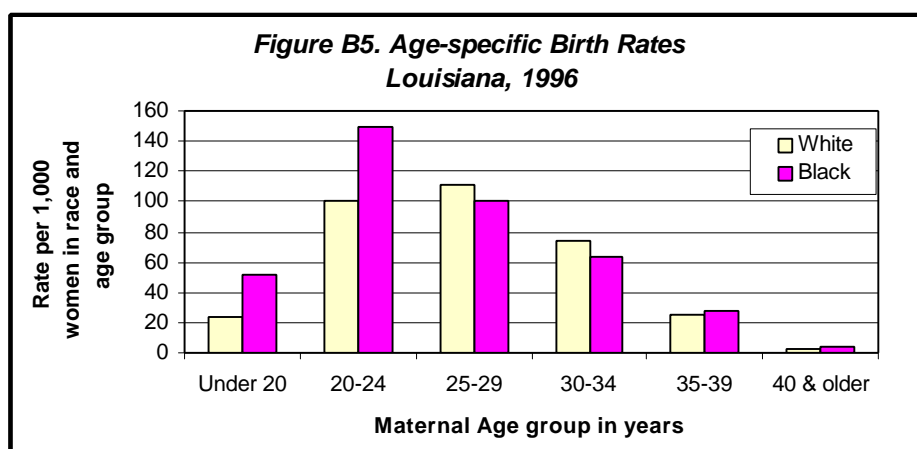
**All Races" includes white, black, and other

Race of Mother

- Of the 65,186 births to Louisiana residents in 1996, **37,236 (57.1%)** were to white mothers, **26,503 (40.7%)** to African-American mothers, and **1,447 (2.2%)** to mothers of other races (Table B5).

Table B5. Counts of Live Births by Maternal Age and Race Louisiana, 1996									
Race	Maternal Age Group								
	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	All Ages
White	65	4939	9807	10991	7856	3037	527	10	37236
Black	308	6849	8870	5218	3385	1543	315	12	26503
Other	3	146	324	440	329	173	27	5	1447
All Races	376	11934	19001	16649	11570	4753	869	27	65186

- **Age-specific birth rates for all race groups peaked in the mothers' twenties** (Figure B5, Table B6).



- The fertility rate of 76.9 births per 1,000 African-American women aged 15 through 44 years was higher than the rate of 58.3 in white women (Table B6). The racial disparity in fertility rates resulted from the rate at which births occurred to women under the age of 25, where age-specific birth rates for African-Americans were much higher than those for whites and other races. After the age of 25, age-specific birth rates for whites and African-Americans were comparable (Figure B5, Table B6).

Table B6. Crude Birth Rates, Fertility Rates, and Age-Specific Birth Rates by Maternal Race Louisiana, 1996										
Race	Crude Birth Rate*	Fertility Rate**	Age-Specific Birth Rate* by Maternal Age Group							
			10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49
White	12.9	58.3	0.6	47.1	101.1	110.8	74.2	25.7	4.7	0.1
Black	19.0	76.9	4.5	96.8	149.3	100.0	64.1	27.4	5.9	0.3
Other	19.9	77.9	0.9	42.1	97.5	143.7	116.7	58.6	9.2	1.9
All Races	15.0	65.1	2.2	66.6	118.9	107.8	71.6	26.8	5.1	0.2

*Rate per 1,000 Population

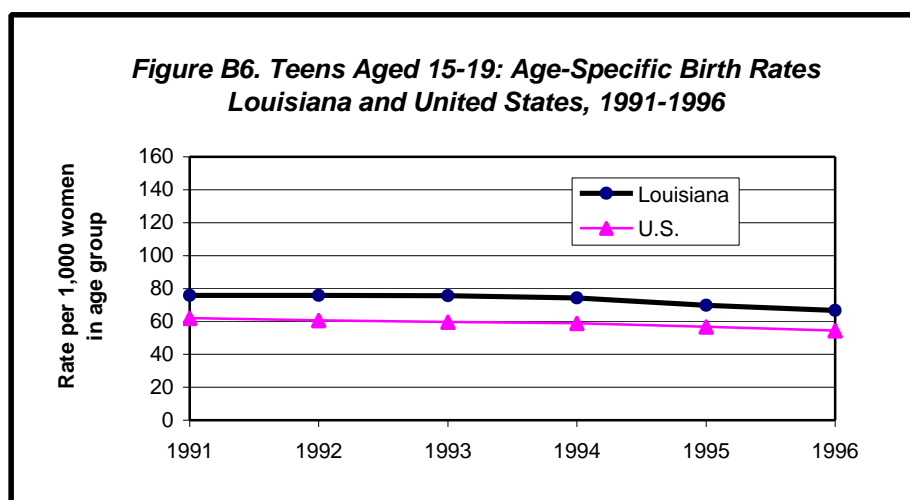
**Rate per 1,000 women aged 15-44 years

*Rate per 1,000 women in age group

Teen Births

A **teen birth** is defined as a birth to a woman under the age of 20 years. Despite an overall decrease in teen birth rates over the last two decades, teenage pregnancy continues to be a problem for the nation. When compared to mothers in other age groups, teen mothers are less likely to receive adequate prenatal care and are more likely to give birth to low birthweight infants.¹ These infants are more likely to be hospitalized and go on to have childhood health problems. Nationally, most (76%) births to teens occur outside of marriage, and 25%² of teenage mothers go on to have more children within the next two years. These factors, combined with the fact that teenage mothers are less likely to finish high school, contribute to the high proportion of women living in poverty who first gave birth during adolescence. In 1993, of the 3.8 million mothers nationwide aged 15-44 who received welfare or Aid to Families with Dependent Children (AFDC), 55% first became mothers as teenagers.³ In fiscal year 1995, Louisiana spent over \$875 million on programs that support families begun by teens (in the form of AFDC, Food Stamps, WIC, and Medicaid). In contrast, Louisiana spent only \$5.7 million on programs designed to prevent teenage pregnancy.⁴

- In 1996, there were 12,310 live births to Louisiana residents under the age of 20 years (Table B5).
- Louisiana's 1996 birth rate for teens aged 15-19 years was 66.6 births per 1,000 women aged 15-19. This rate was 22.4% higher than the national rate of 54.4 (Figure B6, Table B7).
- Reflecting the national trend, teen birth rates in Louisiana for the 15-19 years age group have declined during the 1990s (Figure B6, Table B7).



¹ Lewis CT, Mathews TJ, Heuser RL. *Prenatal Care in the United States, 1980-94*. National Center for Health Statistics. Vital Health Stat 21(54). 1996.

² The Alan Guttmacher Institute. *Sex and America's Teenagers*. 1994.

³ The Alan Guttmacher Institute. *Issues in Brief*. February 1995.

⁴ Kreutzer, Tracy A. *Expenditures and Investments: Adolescent Pregnancy in the South. Volume II*. Southern Regional Project on Infant Mortality. Washington, DC. 1997.

Table B7. Teens: Age-Specific Birth Rates* by Maternal Age Louisiana and United States, 1976-1996				
Year	Louisiana		United States	
	10-14 Years	15-19 Years	10-14 Years	15-19 Years
1976	2.2	76.2	1.2	52.8
1981	2.0	73.9	1.1	52.2
1986	2.4	68.0	1.3	50.2
1991	2.6	75.9	1.4	62.1
1992	2.3	75.8	1.4	60.7
1993	2.4	75.7	1.4	59.6
1994	2.3	74.2	1.4	58.9
1995	2.0	69.8	1.3	56.8
1996	2.2	66.6	1.2	54.4

*Rate per 1,000 women in age group

- The African-American teen birth rate was twice that of white teens, at 51.6 versus 24.2 births per 1,000 women, respectively (Figure B7, Table B8).
- The ratio of African-American to white teen births decreased as age increased. African-American teenagers under the age of 15 gave birth more than seven times as frequently as white teenagers of the same age, while African-Americans 18-19 years old gave birth less than twice as frequently as white teenagers of the same age (Figure B7, Table B8).

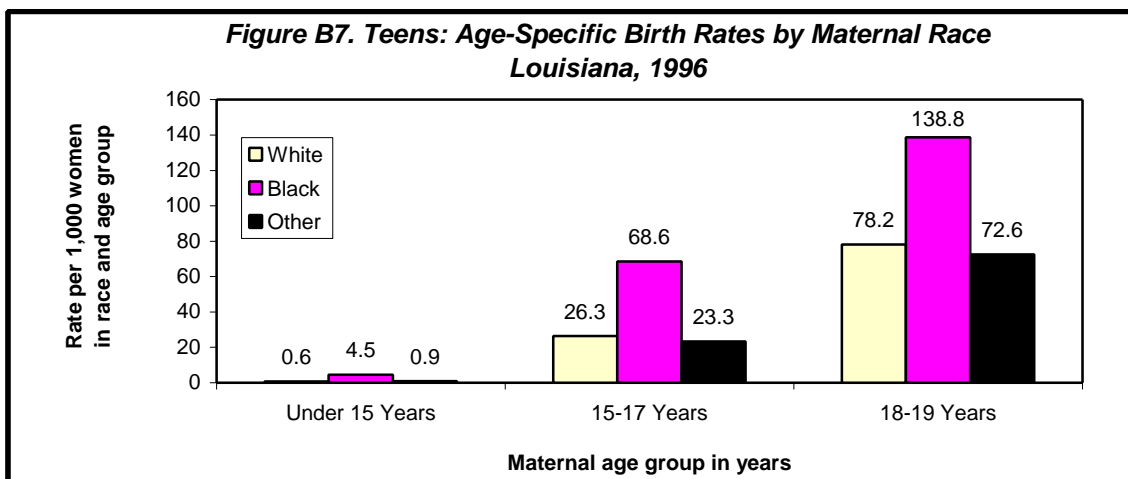


Table B8. Teens: Age-Specific Birth Rates* by Maternal Age and Race Louisiana, 1996				
Maternal Age Group	Age-Specific Birth Rate by Maternal Race			
	White	Black	Other	All Races
Under 15	0.6	4.5	0.9	2.2
15-17	26.3	68.6	23.3	42.9
18-19	78.2	138.8	72.6	102.1
15-19	47.1	96.8	42.1	66.6
All Teens	24.2	51.6	21.8	34.9

*Rate per 1,000 women in race and age group

- Teenage mothers entered prenatal care in a timely manner less frequently (Table B9) and gave birth to low birthweight infants more frequently (Table B10) than mothers of all ages combined.

Table B9. Teens: Counts and Percents of Live Births to Mothers Entering Prenatal Care in the First Trimester, by Maternal Race Louisiana, 1996						
Maternal Age	Maternal Race					
	White		Black		All Races*	
	Number	Percent	Number	Percent	Number	Percent
Under 15	44	67.7	129	42.4	175	47.0
15	126	66.0	277	51.1	410	55.1
16	348	67.1	552	57.6	911	61.0
17	678	72.1	852	61.4	1544	65.7
18	1103	77.2	1122	63.4	2254	69.6
19	1446	78.4	1397	64.5	2875	70.7
All Teens	3745	75.1	4329	60.7	8169	66.6
All Ages	32887	89.9	18590	71.4	52687	82.2

*"All Races" includes white, black, and other

Table B10. Teens: Counts and Percents of Live Births Under 2500 Grams, by Maternal Race Louisiana, 1996						
Maternal Age	Maternal Race					
	White		Black		All Races*	
	Number	Percent	Number	Percent	Number	Percent
Under 15	4	6.2	54	17.6	58	15.5
15	21	10.9	76	13.9	98	13.1
16	57	11.0	138	14.3	197	13.1
17	80	8.4	205	14.7	288	12.2
18	118	8.2	284	16.0	407	12.5
19	151	8.2	324	14.9	475	11.7
All Teens	431	8.6	1081	15.1	1523	12.4
All Ages	2558	6.9	3783	14.3	6450	9.9

*"All Races" includes white, black, and other

Education

- In 1996, 75% of Louisiana's live births were born to mothers with a minimum of a high school education (Table B11).
- 65% of African-American infants and 82% of white infants were born to mothers with a minimum of a high school education (Table B11).

Further breakdowns of education by maternal race are given in Table B11.

Table B11. Counts and Percents of Live Births by Maternal Education and Race Louisiana, 1996								
Educational Level	Number				Percent* of Live Births			
	White	Black	Other	All Races	White	Black	Other	All Races
No high school	1462	1255	144	2861	3.9	4.7	10.0	4.4
Some high school	5299	7920	266	13485	14.3	29.9	18.4	20.7
High school	14315	10699	496	25510	38.5	40.4	34.3	39.2
Some college	7646	4619	196	12461	20.6	17.4	13.6	19.1
College graduate	8458	1978	343	10779	22.7	7.5	23.7	16.6
Total	37180	26471	1445	65096	100.0	100.0	100.0	100.0

*May not sum to 100 due to rounding

Marital Status

- In 1996, there were **28,301 live births to unmarried women**. This represents **43.4% of all 1996 live births** in Louisiana (Table B12).
- Very young women were the most likely to be unmarried, with **close to 100% of all mothers under the age of 15 being unmarried** (Figure B8, Table B12).
- African-American women were unmarried three times as frequently as white women were.** The greatest racial disparity in marital status was seen in women aged 30-34, where African-Americans were six times more likely than whites to be unmarried (Figure B8, Table B12).

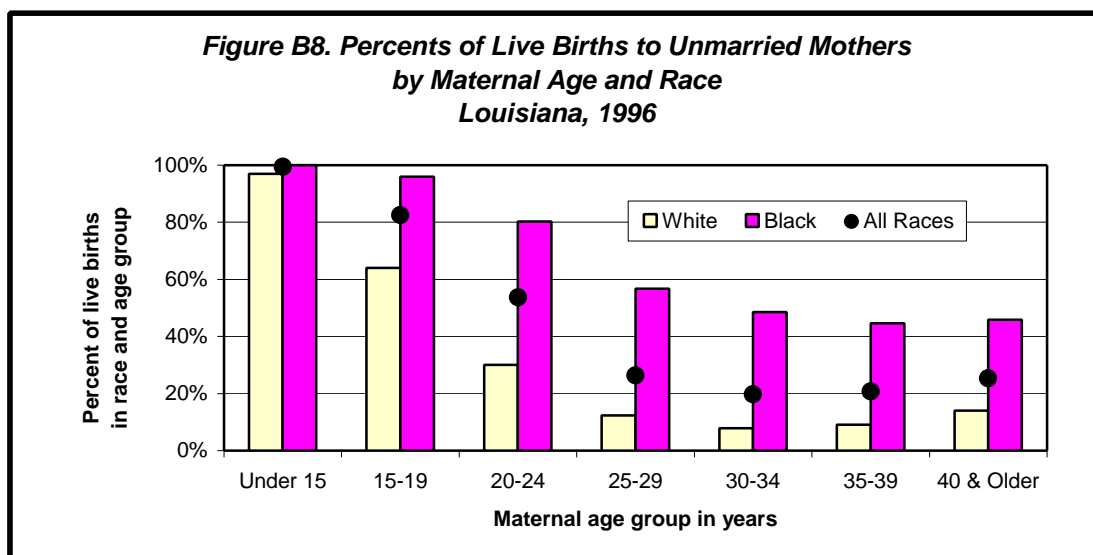


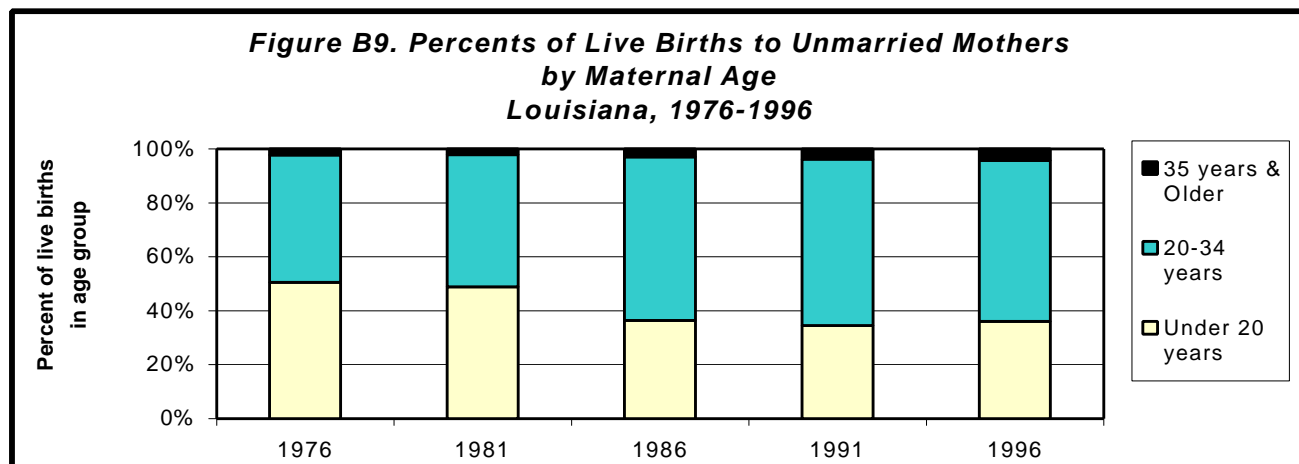
Table B12. Percents of Live Births to Unmarried Mothers by Maternal Age and Race Louisiana, 1996								
Race	Maternal Age Group							All Ages
	Under 15	15-19	20-24	25-29	30-34	35-39	40 & Older	
White	96.9	64.0	30.1	12.3	7.8	9.1	14.0	22.8
Black	100.0	96.0	80.3	56.7	48.5	44.6	45.9	73.4
Other	100.0	73.3	38.3	17.3	7.9	11.0	6.3	24.7
All Races	99.5	82.5	53.7	26.4	19.7	20.7	25.3	43.4

- The annual proportion of live births that occur to unmarried women in Louisiana has doubled in the last two decades (Table B13).
- This increase has occurred in every age group, but can be seen most clearly in women in their twenties, where the percentage of live births to unmarried women in Louisiana has almost tripled in the past 20 years (Table B13).

Table B13. Percents of Live Births to Unmarried Mothers by Maternal Age Louisiana and United States, 1976-1996														
Year	Louisiana							United States						
	Under 20	20-24	25-29	30-34	35-39	40 & Older	All Ages	Under 20	20-24	25-29	30-34	35-39	40 & Older	All Ages
1976	45.7	18.6	9.3	8.9	11.3	13.8	21.3	28.6	8.9	3.6	3.3	4.6	5.8	10.0
1981	51.6	23.1	12.5	10.4	13.5	16.1	23.6	49.9	20.4	9.7	7.8	9.8	12.7	18.9
1986	65.3	33.5	17.2	14.6	15.9	18.2	30.2	61.5	28.7	13.8	10.4	11.7	14.8	23.4
1991	75.1	45.1	23.7	18.9	20.3	20.5	38.3	69.1	39.3	19.2	14.0	14.6	17.4	29.5
1996	83.0	53.7	26.4	19.7	20.7	25.3	43.4	76.3	45.4	21.9	14.7	15.6	18.4	32.4

Source: Louisiana State Center for Health Statistics, National Center for Health Statistics

- Over the past 20 years, there has been an upward shift in the ages of unmarried women. In 1976 teenagers accounted for over 50% of live births to unmarried mothers. By 1996 they accounted for 36% of these births (Figure B9).



- Although the actual number of births to women over 35 years of age is fairly small, the proportion of women in this age group who are unmarried when they give birth has increased steadily over the past 20 years. **In 1976 2.3% of births to unmarried women occurred in the 35 and older age group. In 1996 this figure reached 4.3%, almost double the 1976 figure** (Figure B9). These changes reflect the national trend of older women giving birth outside marriage.

Prenatal Care

Prenatal care is recognized as an important means of providing medical, nutritional, and educational interventions to reduce the risk of adverse pregnancy outcomes, such as infant mortality and low birthweight, and to identify women at high risk for these outcomes. It has been estimated that for every dollar spent on prenatal care, up to \$3.38 can be saved on direct medical costs.⁵ Beyond the positive effect on birth outcomes, prenatal care is a vital part of women's health care, as many women (particularly adolescents, minorities, and women of low socioeconomic status) first enter the health care system during pregnancy.⁶

In Louisiana, adequacy of prenatal care is measured by a **modified Kessner index**. This index defines prenatal care as adequate if the first prenatal visit occurred in the first trimester of pregnancy, and if the total number of visits was appropriate to the gestational age of the baby at birth. However, because these measures assess neither the quality nor the content of prenatal care, they must be recognized only as estimates of the adequacy of the care.

- Of the 64,308 Louisiana residents who had one or more live births in 1996, 74.8% received adequate prenatal care** (Table B14).
- African-American mothers were less likely to receive adequate prenatal care than white mothers were** (Table B14).
- Teenage mothers were less likely to receive adequate prenatal care than older mothers were** (Table B14).

Table B14. Percents of Mothers Delivering Live Infants and Receiving Adequate Prenatal Care*, by Maternal Age Louisiana, 1996							
Race	Maternal Age Group						
	Under 20	20-24	25-29	30-34	35-39	40 & Older	All Ages
White	68.6	78.8	88.8	89.7	88.6	85.0	83.6
Black	52.4	62.0	68.5	71.9	67.3	68.2	62.3
All Races**	59.1	70.9	82.2	84.4	81.4	78.8	74.8

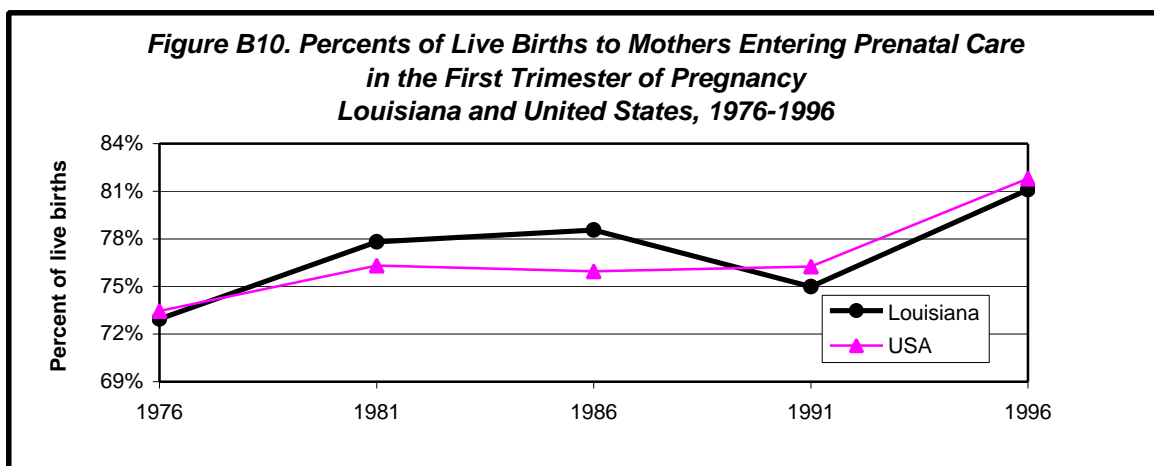
*Adequate Prenatal Care as defined by a modified Kessner index

**"All Races" includes white, black, and other

⁵ Institute of Medicine. *Prenatal care and low birthweight: Effects on health care expenditures*. Preventing Low Birthweight. (pp. 212-37) Washington, DC: National Academy Press. 1985.

⁶ Fiscella, K. *Does prenatal care improve birth outcomes? A critical review*. Obstetrics & Gynecology 85, 468-79. 1995.

- In both Louisiana and the United States, the percentage of live births to mothers entering prenatal care in the first trimester has increased steadily since the early 1990s (Figure B10, Table B15).



Source: National Center for Health Statistics

Table B15. Percents of Live Births to Mothers Entering Prenatal Care in the First Trimester of Pregnancy Louisiana and United States, 1976-1996

Year	Louisiana	United States
1976	72.9	73.5
1981	77.8	76.3
1986	78.6	75.9
1991	75.0	76.2
1992	76.3	77.7
1993	77.4	78.9
1994	79.2	80.2
1995	80.7	81.3
1996	81.1	81.9

Source: National Center for Health Statistics

- Racial differences in timeliness of entry into prenatal care were observed in both Louisiana and the United States (Table B16).

Table B16. Percents of Live Births to Mothers Entering Prenatal Care in the First Trimester of Pregnancy, by Maternal Race Louisiana and United States, 1996

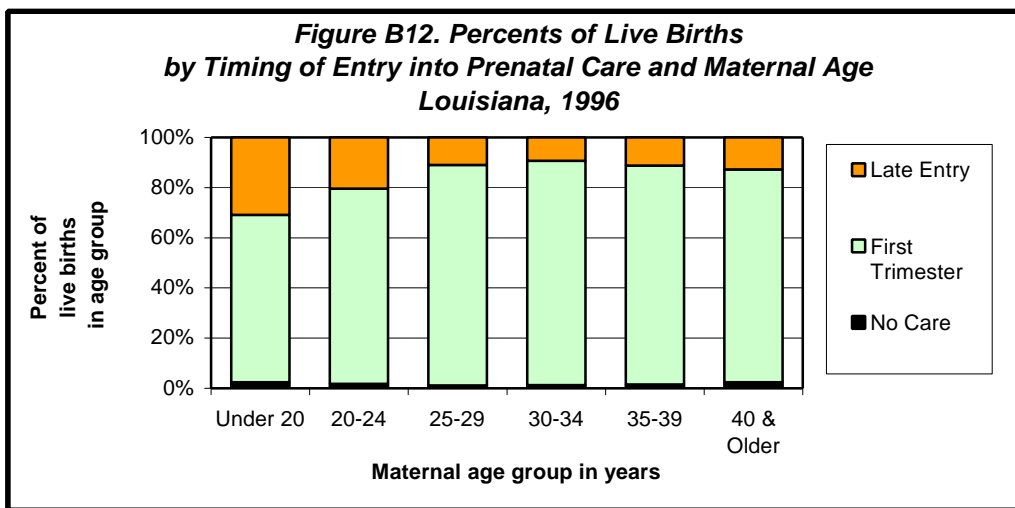
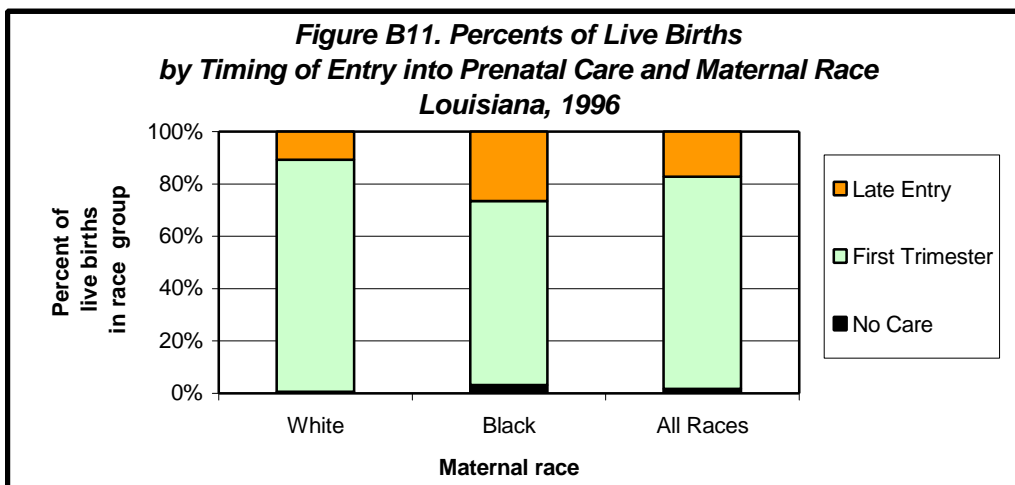
Race	Louisiana	United States
White	88.6	84.0
Black	70.4	71.4
All Races*	81.1	81.9

*"All Races" includes white, black, and other

Source: Louisiana State Center for Health Statistics

National Center for Health Statistics

- In Louisiana in 1996, African-Americans were less likely than whites to enter into prenatal care in the first trimester (Figure B11, Table B17), and teens were less likely than mothers age 20 and older (Figure B12, Table B17).



Age Group	No Care			First Trimester			Second Trimester			Third Trimester		
	White	Black	All Races*	White	Black	All Races*	White	Black	All Races*	White	Black	All Races*
Under 20	1.3	3.3	2.5	75.1	60.7	66.6	20.6	29.9	26.1	3.0	6.1	4.8
20-24	0.6	3.0	1.7	84.5	70.3	77.8	13.1	22.1	17.4	1.7	4.5	3.1
25-29	0.3	3.1	1.2	93.2	76.6	87.8	5.6	17.1	9.4	0.9	3.2	1.6
30-34	0.5	3.1	1.2	94.1	78.7	89.5	4.8	15.6	8.1	0.6	2.6	1.2
35-39	0.4	4.0	1.6	93.2	75.2	87.2	5.8	17.7	9.8	0.6	3.1	1.4
40 & Older	1.5	4.0	2.4	91.1	74.6	84.8	7.0	17.6	11.2	0.4	3.7	1.6
All Ages	0.6	3.2	1.6	88.6	70.4	81.1	9.5	22.1	14.7	1.3	4.3	2.6

*"All Races" includes white, black, and other

Medical Risk Factors for the Pregnancy

The birth attendant records medical risk factors on the birth certificate by checking any of 16 listed risk factors, none, or other. More than one risk factor can be recorded on a birth certificate. In 1996 there were 82 birth certificates for which medical risk factor for the pregnancy was unknown.

- **Pregnancy-associated hypertension was the most frequently reported risk factor** among Louisiana residents giving birth in 1996, at a rate of 29.7 per 1,000 live births (Tables B18 and B19).
 - **African-American mothers experienced pregnancy-associated hypertension at a higher rate than white mothers did.** The rate among African-American mothers was 32.1 occurrences per 1,000 live births, versus the rate of 28.6 occurrences per 1,000 live births among white mothers (Tables B18 and B19).
- **The second most frequently reported medical risk factor was anemia**, at a rate of 27.0 occurrences per 1,000 live births (Tables B18 and B19).
 - **Anemia was the most frequently reported risk factor for African-American mothers**, at a rate of 37.1 occurrences per 1,000 live births compared with white mothers, at a rate of 20.1 occurrences per 1,000 live births (Tables B18 and B19).
- **The third most frequently reported medical risk factor was diabetes**, at a rate of 16.8 occurrences per 1,000 live births. This includes juvenile onset, adult onset, and gestational diabetes during pregnancy (Tables B18 and B19).
 - **White mothers experienced diabetes at a rate** of 17.9 per 1,000 live births, which was **higher than the rate** of 15.5 occurrences per 1,000 live births **for African-American mothers** (Tables B18 and B19).

Medical risk factors reported on birth certificates differed somewhat by age, with very young and old mothers reporting at higher rates.

- **Among teenage mothers (younger than 20 years old at the time of birth), the most frequently reported medical risk factors were** (Tables B18 and B19):
 - **Anemia**, at a rate of 37.4 occurrences per 1,000 live births
 - **Pregnancy-associated hypertension**, with 32.9 occurrences per 1,000 live births
 - **Eclampsia**, with 9.0 occurrences per 1,000 live births.
- **Among mothers 35 years and older, the most frequently reported medical risk factors were** (Tables B18 and B19):
 - **Diabetes**, at a rate of 38.4 occurrences per 1,000 live births
 - **Pregnancy-associated hypertension**, with 36.1 occurrences per 1,000 live births
 - **Chronic hypertension**, with 18.9 occurrences per 1,000 live births.

Table B18. Rates* of Medical Risk Factor of the Pregnancy, by Maternal Age and Race Louisiana, 1996					
Medical Risk Factor of the Pregnancy	All Ages			All Races	
	All Races**	White	Black	Under 20 Years	35 Years & Older
No medical risk factor noted	788.3	812.3	751.0	787.4	751.3
Hypertension, pregnancy-associated	29.7	28.6	32.1	32.9	36.1
Anemia (HCT <30/HGB <10)	27.0	20.1	37.1	37.4	16.3
Diabetes	16.8	17.9	15.5	5.4	38.4
Previous preterm or small infant	6.9	6.4	7.5	3.7	6.9
Uterine bleeding	6.4	7.5	5.1	5.0	5.1
Hypertension, chronic	6.3	4.9	8.6	2.6	18.9
Previous infant, 4000+ grams	5.9	8.3	2.7	-	14.0
Eclampsia	5.4	3.8	7.9	9.0	-
Hydramnios/Oligohydramnios	5.2	4.1	7.0	6.4	6.5
Genital herpes	4.8	4.5	5.3	3.2	6.7
Rh sensitization	2.8	3.6	1.6	1.8	4.2
Incompetent cervix	1.8	1.2	2.6	-	-
Cardiac disease	1.6	1.9	1.2	-	-
Renal disease	1.1	1.0	1.2	-	-
Acute or chronic lung disease	1.0	0.8	1.1	-	-
Hemoglobinopathy	0.4	-	-	-	-

*Rate of occurrence per 1,000 live births

**"All Races" includes white, black, and other

"- " indicates rate is unstable due to low frequency

Table B19. Counts* of Medical Risk Factor of the Pregnancy, by Maternal Age and Race Louisiana, 1996																
Medical Risk Factor	Race	Total	Maternal Age Group													
			Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
No medical risk factor noted	All	51387	282	565	1172	1869	2578	3226	9410	15078	13303	9066	3606	616	22	4
	White	30248	46	161	420	791	1178	1520	4070	8039	8981	6327	2393	382	7	3
	Black	19904	234	396	737	1056	1364	1658	5211	6756	3938	2469	1075	210	10	1
	Other	1235	2	8	15	22	36	48	129	283	384	270	138	24	5	-
Anemia (HCT <30/HGB <10)	All	1757	12	31	54	100	118	146	449	603	389	212	76	16	-	-
	White	749	3	7	18	41	42	51	159	227	202	110	41	7	-	-
	Black	983	8	24	35	58	74	95	286	370	181	96	33	9	-	-
	Other	25	1	-	1	1	2	-	4	6	6	6	2	-	-	-
Cardiac disease	All	106	-	2	1	-	1	5	9	26	23	30	14	4	-	-
	White	71	-	-	1	-	1	1	3	19	16	21	10	2	-	-
	Black	33	-	2	-	-	-	4	6	7	5	9	4	2	-	-
	Other	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-
Acute or chronic lung disease	All	63	2	-	-	3	4	6	13	12	17	15	2	1	-	1
	White	31	-	-	-	-	3	3	6	3	10	9	1	1	-	1
	Black	29	2	-	-	3	1	3	7	8	6	5	1	-	-	-
	Other	3	-	-	-	-	-	-	-	1	1	1	-	-	-	-
Diabetes	All	1097	1	2	6	13	15	29	65	222	303	289	171	44	2	-
	White	668	1	1	3	5	11	16	36	127	199	180	97	28	-	-
	Black	412	-	1	3	8	4	13	29	92	102	102	70	15	2	-
	Other	17	-	-	-	-	-	-	-	3	2	7	4	1	-	-
Genital herpes	All	313	-	3	4	6	13	14	40	93	71	71	31	7	-	-
	White	169	-	-	-	2	5	2	9	39	43	50	22	6	-	-
	Black	140	-	3	4	4	7	12	30	53	28	20	8	1	-	-
	Other	4	-	-	-	-	1	-	1	1	-	1	1	-	-	-

*This is not an unduplicated count because more than one medical risk factor was noted on some birth certificates. 64308 women had 1 or more live births during the calendar year.

(Table continues on the next page)

Table B19 (continued) . Counts* of Medical Risk Factor of the Pregnancy, by Maternal Age and Race
Louisiana, 1996

Medical Risk Factor	Race	Total	Maternal Age Group													
			Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
Hydramnios/Oligohydramnios	All	340	2	7	11	10	25	24	77	103	67	54	33	4	-	-
	White	151	-	2	2	4	9	6	23	51	36	30	10	1	-	-
	Black	186	2	5	9	6	16	18	54	51	31	23	22	3	-	-
	Other	3	-	-	-	-	-	-	-	1	-	1	1	-	-	-
Hemoglobinopathy	All	23	-	1	1	1	-	3	6	6	7	2	2	-	-	-
	White	4	-	-	1	-	-	-	1	-	3	-	-	-	-	-
	Black	18	-	1	-	1	-	2	4	6	4	2	2	-	-	-
	Other	1	-	-	-	-	-	1	1	-	-	-	-	-	-	-
Hypertension, chronic	All	412	2	2	5	6	7	10	30	85	89	99	84	22	1	-
	White	183	-	1	2	3	2	2	10	38	49	47	29	10	-	-
	Black	227	2	1	3	3	5	8	20	47	39	52	54	12	1	-
	Other	2	-	-	-	-	-	-	-	-	1	-	1	-	-	-
Hypertension, pregnancy associated	All	1935	19	28	44	77	98	140	387	567	459	299	160	42	2	-
	White	1066	2	6	14	25	45	72	162	294	304	189	86	27	2	-
	Black	852	17	22	30	52	52	68	224	268	151	104	73	15	-	-
	Other	17	-	-	-	-	1	-	1	5	4	6	1	-	-	-
Eclampsia	All	354	6	10	14	31	22	28	105	114	73	38	16	2	-	-
	White	143	1	2	6	8	3	7	26	49	38	19	8	2	-	-
	Black	209	5	8	8	23	19	21	79	64	34	19	8	-	-	-
	Other	2	-	-	-	-	-	-	-	1	1	-	-	-	-	-
Incompetent cervix	All	119	-	-	1	7	3	5	16	30	28	27	14	4	-	-
	White	45	-	-	-	-	2	3	5	7	11	15	4	3	-	-
	Black	70	-	-	1	7	1	2	11	23	15	12	8	1	-	-
	Other	4	-	-	-	-	-	-	-	-	2	-	2	-	-	-
Previous infant 4000+ Grams	All	382	-	-	1	1	1	4	7	58	116	122	61	18	-	-
	White	308	-	-	1	-	-	4	5	37	102	99	51	14	-	-
	Black	72	-	-	-	1	1	-	2	20	13	23	10	4	-	-
	Other	2	-	-	-	-	-	-	-	1	1	-	-	-	-	-
Previous preterm or small for gestational age infant	All	448	-	1	4	2	15	24	46	137	133	93	31	8	-	-
	White	239	-	-	1	-	2	8	11	58	79	63	22	6	-	-
	Black	199	-	1	3	2	13	16	35	73	51	30	8	2	-	-
	Other	10	-	-	-	-	-	-	-	6	3	-	1	-	-	-
Rh sensitization	All	181	-	-	4	4	4	10	22	47	45	43	21	3	-	-
	White	135	-	-	3	4	2	5	14	31	36	37	14	3	-	-
	Black	43	-	-	1	-	2	5	8	16	9	5	5	-	-	-
	Other	3	-	-	-	-	-	-	-	-	-	1	2	-	-	-
Uterine bleeding	All	417	-	5	7	11	22	17	62	128	117	81	25	4	-	-
	White	278	-	2	2	3	13	9	29	85	86	55	20	3	-	-
	Black	135	-	3	5	8	9	8	33	43	29	24	5	1	-	-
	Other	4	-	-	-	-	-	-	-	-	2	2	-	-	-	-
Other	All	7170	63	117	206	273	392	453	1441	2055	1686	1252	561	112	-	-
	White	3273	13	13	58	71	139	166	447	823	924	707	297	62	-	-
	Black	3779	49	101	147	202	251	284	985	1211	730	514	242	48	-	-
	Other	118	1	3	1	-	2	3	9	21	32	31	22	2	-	-
Unknown medical risk factor	All	82	1	2	2	4	2	5	15	16	8	20	10	10	-	2
	White	57	1	1	1	4	1	-	7	12	6	15	8	8	-	-
	Black	21	-	1	1	-	1	3	6	4	1	4	2	2	-	2
	Other	4	-	-	-	-	-	2	2	-	1	1	-	-	-	-

*This is not an unduplicated count because more than one medical risk factor was noted on some birth certificates. 64308 women had 1 or more live births during the calendar year.

Tobacco and Alcohol Use during Pregnancy

Use of tobacco and alcohol during pregnancy, as reported by the mother at the time of birth, is recorded on the birth certificate. Because this information depends on the mother's recall, it is subject to inaccuracies in reporting.

- In 1996, 10.7% of mothers who provided information reported using tobacco during pregnancy, and 0.7% reported using alcohol during pregnancy (Table B20).
- Among whites, 14.4% reported using tobacco, and 0.5% reported using alcohol.
- Among African-Americans, tobacco and alcohol use were reported to be 5.8% and 1.0%, respectively.

Table B20. Counts of Mothers by Use of Tobacco and Alcohol during Pregnancy, Maternal Age, and Maternal Race Louisiana, 1996																
Substance Use	Race	Total	Maternal Age Group													
			Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
No tobacco use	All	57287	360	704	1375	2102	2850	3575	10606	16573	14780	10114	4092	735	23	4
	White	31354	54	162	416	735	1107	1452	3872	7894	9581	6875	2622	446	7	3
	Black	24578	303	531	947	1346	1707	2078	6609	8381	4781	2927	1302	263	11	1
	Other	1355	3	11	12	21	36	45	125	298	418	312	168	26	5	-
Tobacco use	All	6881	13	36	114	234	371	443	1198	2176	1604	1213	568	105	3	1
	White	5292	11	26	97	204	315	382	1024	1780	1238	818	354	64	2	1
	Black	1513	2	10	13	28	50	54	155	372	348	385	210	40	1	-
	Other	76	-	-	4	2	6	7	19	24	18	10	4	1	-	-
Unknown tobacco use	All	140	1	3	-	7	4	10	24	34	22	33	13	11	-	2
	White	91	-	2	-	5	3	2	12	23	15	24	8	9	-	-
	Black	45	1	1	-	2	1	6	10	11	6	8	5	2	-	2
	Other	4	-	-	-	-	-	2	2	-	1	1	-	-	-	-
No alcohol use	All	63736	372	739	1484	2332	3213	4002	11770	18671	16281	11207	4584	820	26	5
	White	36495	64	188	512	936	1416	1826	4878	9658	10788	7656	2936	502	9	4
	Black	25816	305	540	956	1373	1755	2126	6750	8693	5058	3230	1476	291	12	1
	Other	1425	3	11	16	23	42	50	142	320	435	321	172	27	5	-
Alcohol use	All	442	1	1	4	6	9	14	34	84	106	122	75	20	-	-
	White	171	1	-	1	5	7	8	21	25	36	40	39	9	-	-
	Black	266	-	1	3	1	2	4	11	57	70	81	36	11	-	-
	Other	5	-	-	-	-	-	2	2	2	-	1	-	-	-	-
Unknown alcohol use	All	130	1	3	1	5	3	12	24	28	19	31	14	11	-	2
	White	71	-	2	-	3	2	2	9	14	10	21	9	8	-	-
	Black	54	1	1	1	2	1	8	13	14	7	9	5	3	-	2
	Other	5	-	-	-	-	-	2	2	-	2	1	-	-	-	-

*This is not an unduplicated count because more than one medical risk factor was noted on some birth certificates. 64308 women had 1 or more live births during the calendar year.

NEWBORN PROFILE

Sex

- In 1996 Louisiana's *male/female birth ratio* was 1.036, which means 1,036 males were born for every 1,000 females. By race, the male/female ratios were 1.048 for whites, 1.017 for African-Americans, and 1.097 for other races (Table B21).

<i>Table B21. Counts of Live Births by Infant Gender and Maternal Race Louisiana, 1996</i>				
<i>Gender</i>	<i>Maternal Race</i>			
	<i>White</i>	<i>Black</i>	<i>Other</i>	<i>All Races</i>
Male	19053	13361	757	33171
Female	18183	13142	690	32015
Male/Female Ratio	1.048	1.017	1.097	1.036

Birthweight

A **low birthweight** infant is defined as an infant weighing less than 2500 grams (5 pounds, 8 ounces) at birth. Low birthweight is a major cause of infant mortality, with more than three-quarters of infant deaths caused by babies being born too small or too early.⁷ Low birthweight has been linked to several preventable factors, including lack of prenatal care, maternal smoking, use of alcohol and other drugs, and pregnancy before the age of 18 years. Other risk factors for low birthweight include low socioeconomic level, low maternal weight gain, low pregnancy weight, first births, female sex, short maternal stature, prior low birthweight births, maternal illnesses, fetal infections, and a variety of metabolic and genetic disorders.

Low birthweight infants who survive are more likely than normal weight infants to have brain damage, lung and liver disease, subnormal growth, developmental problems, and other adverse health conditions. The effects of low birthweight follow these infants throughout life, through a greater likelihood of learning disorders, attention disorders, and developmental impairments.⁸ A higher proportion of low birthweight infants go on to be enrolled in special education classes than their normal birthweight counterparts.⁹

- In 1996, 6,450 (9.9% of total live births) of the infants born to Louisiana residents weighed less than 2500 grams. In the United States, 7.4% of infants born in the United States were low birthweight (Tables B22 and B26).

⁷ Paneth NS. *The problem of low weight*. The Future of Children, Low Birth Weight, 19-34. 1995.

⁸ Institute of Medicine. *The significance of low birthweight*. Preventing low birthweight, 21-45. Washington, DC: National Academy Press. 1985.

⁹ Hack M, Klein NK, Taylor HG. *Long-term developmental outcomes of low birth weight infants*. The Future of Children, Low Birth Weight, 19-34. 1995.

- In recent years, neither Louisiana nor the nation has shown any reduction in the percentage of infants born with low birthweight (Table B22).

Table B22. Percents of Live Births Less Than 2500 Grams Louisiana and United States, 1992-1996		
Year	Louisiana	United States
1992	9.4	7.1
1993	9.4	7.2
1994	9.6	7.3
1995	9.7	7.3
1996	9.9	7.4

Source: Louisiana State Center for Health Statistics
National Center for Health Statistics

- African-American mothers gave birth to infants of low birthweight more than twice as frequently as white mothers, at 14.3% compared with 6.9% of live births. This discrepancy held true for all age groups (Figure B13, Tables B23 and B24). These figures are comparable with those seen at the national level (Table B23).

Table B23. Percents of Live Births Less Than 2500 Grams by Maternal Race Louisiana and United States, 1996			
Location	Maternal Race		
	White	Black	All Races*
Louisiana	6.9	14.3	9.9
United States	6.3	13.0	7.4

*"All Races" includes white, black, and other
Source: Louisiana State Center for Health Statistics
National Center for Health Statistics

- Among the maternal age groups, mothers less than 20 years old had the highest percentage of low birthweight infants (12.4% of live births) (Figure B13, Table B24).

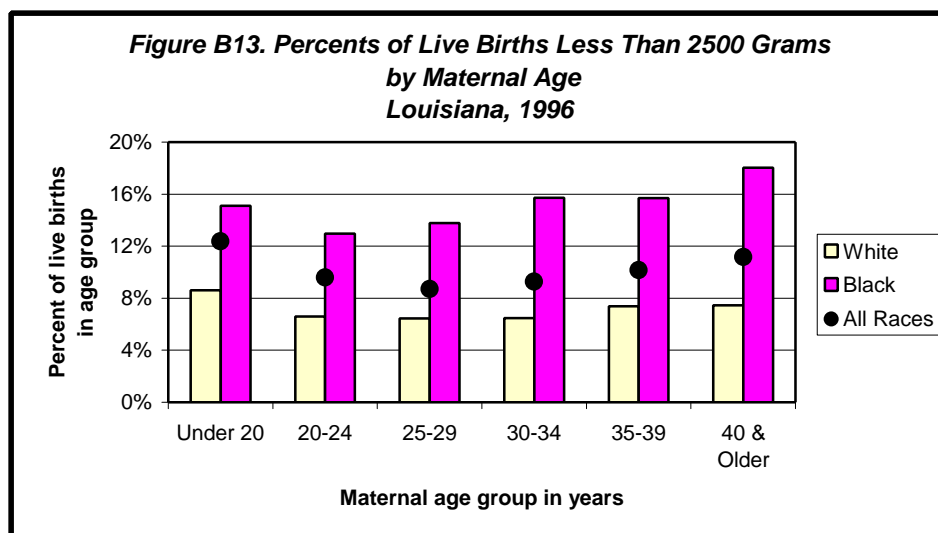
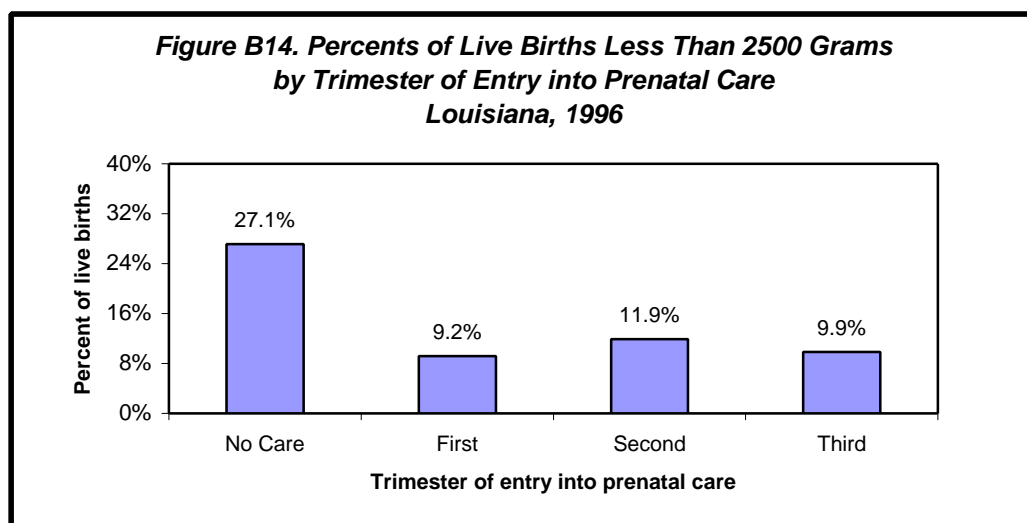


Table B24. Percents of Live Births Less Than 2500 Grams, by Maternal Age Louisiana, 1996							
Race	Maternal Age Group						All Ages
	Under 20	20-24	25-29	30-34	35-39	40 & Older	
White	8.6	6.6	6.4	6.5	7.4	7.4	6.9
Black	15.1	13.0	13.8	15.7	15.7	18.0	14.3
All Races*	12.4	9.6	8.7	9.3	10.1	11.2	9.9

All Races includes white, black, and other

- Over 25% of births to mothers who had no prenatal care were low birthweight (Figure B14).
- For women who received prenatal care, trimester of entry into prenatal care did not impact the percent of low birthweight births. Occurrence of low birthweight births among women who received prenatal care was approximately 10% for all three trimesters of entry into prenatal care (Figure B14).



Infants weighing less than 1500 grams at birth (3 lbs. 8 oz.) are considered to be **very low birthweight** and are at much greater risk of mortality and long-term disability than higher weight infants. Although recent medical advances have greatly reduced the risk of death for smaller infants, the risk of early death for a very low birthweight infant is about 65 times that of infants who weigh at least 1500 grams.¹⁰

- In 1996, 1.9% of infants born to Louisiana residents weighed less than 1500 grams (Table B25), as compared with 1.4% of infants born to United States residents.

¹⁰ Ventura SJ, Martin JA, Curtin SC, Mathews TJ. *Report of final natality statistics, 1995*. Monthly vital statistics report; vol 45 no 11, supp. Hyattsville, Maryland: National Center for Health Statistics. 1997.

- As with infants weighing less than 2500 grams, the frequency of very low weight births differed by race and age group.
- **African-American mothers gave birth to very low birthweight infants three times as frequently as white mothers**, at 3.1% compared with 1.1% of live births (Table B25).
- **Infants born to young mothers and older mothers of all races were more frequently very low birthweight.** Of all infants born to mothers under the age of 20, 2.3% were very low birthweight, and 2.2% of infants born to mothers over the age of 40 weighed less than 1500 grams (Table B25).

Table B25. Percents of Live Births Less Than 1500 Grams, by Maternal Age Louisiana, 1996							
Race	Maternal Age Group						
	Under 20	20-24	25-29	30-34	35-39	40 & Older	All Ages
White	1.4	1.1	1.1	0.9	1.2	1.3	1.1
Black	2.9	2.7	3.5	3.4	3.7	4.1	3.1
All Races*	2.3	1.8	1.8	1.6	2.0	2.2	1.9

*"All Races" includes white, black, and other

Tables B26 through B28 present detailed breakdowns of birthweight by live birth order, maternal race and age, and infant gender.

Table B26. Counts of Live Births by Live Birth Order and Infant Birthweight Louisiana, 1996												
Birth Order	Total	Birthweight In Grams								Weight not Stated	Births Under 2500 Grams	Percent of Total Live Births Under 2500 Grams
		999 or less	1000 through 1999	2000 through 2499	2500 through 2999	3000 through 3499	3500 through 3999	4000 through 4499	4500 and over			
All	65186	623	1870	3957	12798	24698	16292	4185	746	17	6450	9.89
1	27146	271	758	1655	5638	10478	6542	1549	248	7	2684	9.89
2	20596	166	520	1102	3606	7948	5528	1458	266	2	1788	8.68
3	10637	97	307	632	2082	3920	2708	764	126	1	1036	9.74
4	3993	44	145	295	824	1399	956	269	60	1	484	12.12
5	1548	29	70	156	341	527	325	75	24	1	255	16.47
6	626	7	30	60	151	220	109	38	10	1	97	15.50
7	290	5	19	33	77	90	50	12	4	-	57	19.66
8	138	3	12	9	33	49	19	7	6	-	24	17.39
9	69	-	1	6	19	17	17	6	2	1	7	10.14
10	30	-	3	-	2	10	13	2	-	-	3	10.00
11	16	-	-	1	5	5	4	1	-	-	1	6.25
12	12	-	-	3	4	5	-	-	-	-	3	25.00
13	6	-	1	-	1	4	-	-	-	-	1	16.67
14	2	-	-	-	-	1	1	-	-	-	-	0.00
15	1	-	1	-	-	-	-	-	-	-	1	100.00
16	5	-	1	-	3	1	-	-	-	-	1	20.00
Unk.	71	1	2	5	12	24	20	4	-	3	8	11.27

Table B27. Counts of Live Births by Birthweight, Maternal Age, and Maternal Race Louisiana, 1996													
Maternal Race and Age	Total	Birthweight in Grams											
		499 or less	500- 749 grams	750- 999 grams	1000- 1499 grams	1500- 1999 grams	2000- 2499 grams	2500- 2999 grams	3000- 3499 grams	3500- 3999 grams	4000- 4499 grams	4500 and over	Weight not Stated
All races*	65186	145	241	237	621	1249	3957	12798	24698	16292	4185	746	17
Under 15 years	376	-	5	1	7	15	30	114	138	55	11	-	-
15-19 years	11934	34	52	54	129	272	924	2901	4715	2339	457	56	1
20-24 years	19001	38	73	69	170	335	1138	3929	7383	4606	1083	172	5
25-29 years	16649	34	66	63	145	269	871	2904	6311	4544	1215	227	-
30-34 years	11570	27	27	37	96	218	668	1892	4206	3265	944	185	5
35-39 years	4753	10	15	12	60	118	267	878	1620	1264	416	89	4
40-44 years	869	2	3	1	14	21	57	168	316	214	56	17	-
45 years & over	27	-	-	-	-	1	1	11	7	4	3	-	-
Not stated	7	-	-	-	-	-	1	1	2	1	-	-	2
White	37236	37	73	84	217	498	1649	5791	13950	11217	3139	572	9
Under 15 years	65	-	1	-	1	1	1	16	23	16	6	-	-
15-19 years	4939	9	14	16	31	77	280	940	1980	1272	283	37	-
20-24 years	9807	10	18	21	56	116	425	1624	3766	2898	745	127	1
25-29 years	10991	9	31	23	59	131	455	1585	4073	3463	983	179	-
30-34 years	7856	5	4	17	43	114	325	1072	2861	2506	756	149	4
35-39 years	3037	4	4	7	21	53	135	452	1055	908	328	66	4
40-44 years	527	-	1	-	6	6	26	97	189	151	37	14	-
45 years & over	10	-	-	-	-	-	1	4	2	2	1	-	-
Not stated	4	-	-	-	-	-	1	1	1	1	-	-	-
Black	26503	104	165	153	395	737	2229	6671	10170	4729	977	165	8
Under 15 years	308	-	4	1	6	14	29	96	115	38	5	-	-
15-19 years	6849	25	37	38	97	195	635	1921	2679	1036	166	19	1
20-24 years	8870	27	54	48	112	213	696	2222	3501	1626	324	43	4
25-29 years	5218	25	34	40	84	137	399	1223	2030	991	213	42	-
30-34 years	3385	19	23	20	53	101	316	747	1215	679	175	36	1
35-39 years	1543	6	11	5	35	61	124	393	508	301	77	22	-
40-44 years	315	2	2	1	8	15	30	64	117	56	17	3	-
45 years & over	12	-	-	-	-	1	-	5	4	2	-	-	-
Not stated	3	-	-	-	-	-	-	-	1	-	-	-	2

*"All Races" includes white, black, and other.

Table B28. Counts and Percents* of Live Births by Infant Birthweight, Infant Gender, and Maternal Race Louisiana, 1996

Weight In Grams	All Races		White				Black				Other			
	Total	Percent	Male	Percent	Female	Percent	Male	Percent	Female	Percent	Male	Percent	Female	Percent
Under 500	145	0.22	18	0.09	19	0.10	52	0.39	52	0.40	-	-	4	0.58
500-749	241	0.37	36	0.19	37	0.20	94	0.70	71	0.54	2	0.26	1	0.14
750-999	237	0.36	45	0.24	39	0.21	68	0.51	85	0.65	-	-	-	-
1000-1499	621	0.95	123	0.65	94	0.52	191	1.43	204	1.55	2	0.26	7	1.01
1500-1999	1249	1.92	247	1.30	251	1.38	355	2.66	382	2.91	5	0.66	9	1.30
2000-2499	3957	6.07	780	4.09	869	4.78	996	7.45	1233	9.38	34	4.49	45	6.52
2500-2999	12798	19.63	2584	13.56	3207	17.64	2985	22.34	3686	28.05	155	20.48	181	26.23
3000-3499	24698	37.89	6680	35.06	7270	39.98	5101	38.18	5069	38.57	299	39.50	279	40.43
3500-3999	16292	24.99	6184	32.46	5033	27.68	2809	21.02	1920	14.61	211	27.87	135	19.57
4000-4499	4185	6.42	1975	10.37	1164	6.40	593	4.44	384	2.92	41	5.42	28	4.06
4500+	746	1.14	376	1.97	196	1.08	112	0.84	53	0.40	8	1.06	1	0.14
Unknown	17	0.03	5	0.03	4	0.02	5	0.04	3	0.02	-	-	-	-
Total	65186	100	19053	100	18183	100	13361	100	13142	100	757	100	690	100

*Percentages may not add to 100 due to rounding.

Gestational Age

Gestational age is recorded on Louisiana's birth certificates by the birth attendants. Several different methods are used to estimate gestational age, including computing the interval between the first day of the mother's last normal menstrual period (LMP) and the date of birth, or determining a clinical estimate based on examination of the newborn. Because these methods have inherent limitations (for example, imperfect maternal recall of LMP), measurement of gestational age is imprecise. Without standardized methods of measurement, determination of gestational age will remain an issue, especially among at-risk pregnancies in which minimal or no prenatal ascertainties were made.

A birth is considered **preterm** if the gestational age at delivery is less than 37 weeks.

In 1996 in Louisiana, there were 139 infants for whom no estimate of gestational age was recorded.

- In 1996, 11.2% of all live births in Louisiana were estimated to be preterm (Table B29).
- African-American mothers delivered preterm infants almost twice as frequently as white mothers (15.4% versus 8.3% of live births, respectively) (Table B29).
- Mothers age 40 and older delivered preterm infants more frequently than any other age group (15.0% of live births) (Table B29).

Table B29. Counts and Percents of Preterm Live Births (less than 37 weeks), by Maternal Age and Race Louisiana, 1996

Race	Maternal Age Group													
	Under 20		20-24		25-29		30-34		35-39		40 & Older		All Ages	
	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent	Num	Percent
White	462	9.2	766	7.8	867	7.9	634	8.1	301	10.0	58	11.0	3088	8.3
Black	1105	15.5	1248	14.1	813	15.6	581	17.2	257	16.7	74	22.8	4078	15.4
All Races*	1579	12.9	2044	10.8	1706	10.3	1240	10.7	576	12.2	133	15.0	7278	11.2

*"All Races" includes white, black, and other

Multiple Births

- In 1996 63,399 live births (97.3% of total live births) were part of a single delivery.
- 1,723 live births (2.6% of total live births) were part of a twin delivery, 57 (0.1%) were part of a triplet delivery, and seven live births were part of a quadruplet delivery.

Apgar Score

The **Apgar score** is a composite measure of the physical health of an infant shortly after birth. It is assessed at one and five minutes after birth, and is used to predict the infant's chances of survival. Five characteristics of the baby that are easily identifiable – heart rate, respiratory effort, muscle tone, reflex irritability, and color – are assessed on a scale of 0 to 2, with 2 being optimum. The Apgar score is the sum of these scores, with a score of 7 or higher indicating that the infant is in good physical condition, and a score of 10 being perfect. As the five-minute score is generally considered to be a better predictor of survival, it is that score that is reported here.

In 1996 fewer than 1% (230) of birth certificates had no Apgar score recorded.

- In 1996, 14.1% (9,152) of live births received an Apgar score of 10, and 1.7% (1,083) of infants had low (0-6) Apgar scores (Tables B30 and B31).
- Age and racial breakdowns were consistent with low birthweight percentages; infants born to very young mothers, older mothers, and African-American mothers received the highest percentages of below normal scores (Tables B30 and B31).

Table B30. Counts and Percents of Births with Below Normal (0-6) Five Minute Apgar Scores, by Maternal Age Louisiana, 1996

Count/Percent	Maternal Age Group						
	Under 20	20-24	25-29	30-34	35-39	40 & Older	All Ages
Number	255	309	244	167	84	24	1083
Percent of Live Births	2.1	1.6	1.5	1.5	1.8	2.7	1.7

Table B31. Counts and Percents of Births with Below Normal (0-6) Apgar Scores by Maternal Race Louisiana, 1996				
Count/Percent	Maternal Race			
	White	Black	Other	All Races
Number	376	690	17	1083
Percent of Live Births	1.0	2.6	1.2	1.7

*"All Races" includes white, black, and other

Abnormal Conditions of the Newborn

Abnormal conditions of the newborn are recorded on the birth certificate by checking any of 8 listed conditions, none, or other. More than one condition can be checked on a birth certificate.

- The two most commonly reported abnormal newborn conditions were assisted ventilation 30 minutes or more (with a rate of 7.2 per 1,000 live births) and assisted ventilation less than 30 minutes (with a rate of 6.0 per 1,000 live births).
- The third most commonly reported abnormal condition was hyaline membrane disease/respiratory distress syndrome, with a rate of 5.4 per 1,000 live births.

Table B32 gives detailed counts of abnormal conditions of the newborn by age and race of the mother.

Table B32. Counts* of Abnormal Conditions of the Newborn, by Maternal Age and Race Louisiana, 1996																
Condition	Race	Total	Maternal Age Group													
			Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
None	All	61645	346	696	1410	2227	3053	3838	11224	17992	15780	10989	4478	805	26	5
	White	35509	55	180	496	890	1351	1768	4685	9374	10496	7513	2886	487	9	4
	Black	24746	288	505	898	1315	1661	2018	6397	8308	4859	3163	1426	292	12	1
	Other	1390	3	11	16	22	41	52	142	310	425	313	166	26	5	-
Anemia (HCT < 39/HGB < 13)	All	117	2	2	3	4	3	11	23	33	30	17	9	3	-	-
	White	36	-	-	-	1	-	3	4	9	8	6	6	3	-	-
	Black	80	2	2	3	3	3	8	19	24	22	11	2	-	-	-
	Other	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Birth injury	All	92	-	1	3	-	5	2	11	25	24	23	8	1	-	-
	White	70	-	1	2	-	2	1	6	16	18	21	8	1	-	-
	Black	19	-	-	1	-	3	1	5	8	5	1	-	-	-	-
	Other	3	-	-	-	-	-	-	-	1	1	1	-	-	-	-
Fetal alcohol syndrome	All	9	-	-	-	-	-	-	-	2	2	2	1	2	-	-
	White	4	-	-	-	-	-	-	-	1	1	-	-	2	-	-
	Black	5	-	-	-	-	-	-	-	1	1	2	1	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hyaline membrane disease/ Respiratory distress syndrome	All	355	6	9	8	9	20	29	75	101	101	44	22	6	-	-
	White	220	2	5	6	4	10	15	40	53	74	27	18	6	-	-
	Black	132	4	4	2	4	10	14	34	47	26	17	4	-	-	-
	Other	3	-	-	-	1	-	-	1	1	1	-	-	-	-	-
Meconium aspiration syndrome	All	94	-	-	2	5	4	4	15	26	23	17	11	1	1	-
	White	49	-	-	2	3	2	2	9	8	13	11	7	-	1	-
	Black	45	-	-	-	2	2	2	6	18	10	6	4	1	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*This is not an unduplicated count. More than one condition was noted on some birth certificates.

(Table continues on the next page)

Table B32 (continued). Counts* of Abnormal Conditions of the Newborn, by Maternal Age and Race Louisiana, 1996																
Condition	Race	Total	Maternal Age Group													
			Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
Assisted ventilation less than 30 minutes	All	391	5	5	16	11	18	28	78	104	98	71	30	5	-	-
	White	175	-	1	3	3	5	7	19	40	53	48	12	3	-	-
	Black	211	5	4	13	7	13	21	58	64	44	21	17	2	-	-
	Other	5	-	-	-	1	-	-	1	-	1	2	1	-	-	-
Assisted ventilation 30 minutes or more	All	469	4	9	14	13	21	36	93	126	126	73	31	15	1	-
	White	245	-	4	3	8	9	17	41	54	76	42	21	10	1	-
	Black	221	4	5	11	5	12	19	52	70	50	30	10	5	-	-
	Other	3	-	-	-	-	-	-	-	2	-	1	-	-	-	-
Seizures	All	62	-	1	3	2	1	1	8	12	21	13	4	4	-	-
	White	40	-	-	-	1	1	-	2	6	17	10	2	3	-	-
	Black	22	-	1	3	1	-	1	6	6	4	3	2	1	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	All	2467	21	38	58	107	164	165	532	736	566	387	192	33	-	-
	White	1112	8	7	12	45	69	51	184	304	298	206	95	17	-	-
	Black	1312	13	31	46	61	94	114	346	420	257	171	90	15	-	-
	Other	43	-	-	-	1	1	-	2	12	11	10	7	1	-	-
Unknown	All	98	-	1	-	4	2	8	15	17	15	26	12	11	-	2
	White	69	-	1	-	3	1	1	6	14	13	19	9	8	-	-
	Black	24	-	-	-	1	1	5	7	3	1	5	3	3	-	2
	Other	5	-	-	-	-	-	2	2	-	1	2	-	-	-	-

*This is not an unduplicated count. More than one condition was noted on some birth certificates.

Congenital Anomalies

Congenital anomalies are recorded on the birth certificate by checking any of 21 listed anomalies, none, or other. More than one anomaly can be recorded on a birth certificate. Because these events occur so infrequently, rates have been calculated for categories of anomalies.

- **There were 694 birth certificates with at least one congenital anomaly reported** (Table B33).
- **The most commonly reported category of congenital anomalies was musculoskeletal/integumental anomalies** at a rate of 31.8 per 10,000 live births. This includes cleft lip/palate, polydactyly/syndactyly/adactyly, clubfoot, and diaphragmatic hernia, as well as other musculoskeletal/integumental anomalies.
- **The second most commonly reported category was circulatory/respiratory anomalies**, which includes heart malformations, at a rate of 10.6 per 10,000 live births.
- **The third most commonly reported category was urogenital anomalies** at a rate of 10.1 per 10,000 live births. This category includes malformed genitalia and renal agenesis, as well as other urogenital anomalies.

Table B33 gives detailed counts of congenital anomalies reported for 1996 births, categorized by maternal age.

Table B33. Counts* of Congenital Anomalies by Type of Anomaly and Maternal Age Louisiana, 1996										
Congenital anomaly	Maternal Age Group									
	Total	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
Total	776	12	142	220	199	135	41	27	-	-
Anencephalus	6	-	1	3	-	2	-	-	-	-
Spinal bifida/Meningocele	20	-	3	6	8	1	1	1	-	-
Hydrocephalus	5	-	1	2	1	1	-	-	-	-
Microcephalus	5	-	1	1	1	2	-	-	-	-
Other central nervous system anomalies	5	-	1	2	2	-	-	-	-	-
Heart malformations	39	-	4	8	12	8	6	1	-	-
Other circulatory/Respiratory anomalies	30	1	4	11	7	4	2	1	-	-
Rectal atresia/Stenosis	5	1	1	-	1	1	1	-	-	-
Tracheo esophageal fistula/Esophageal atresia	5	1	-	3	-	1	-	-	-	-
Omphalocele/Gastroschisis	11	-	3	5	-	-	2	1	-	-
Other gastrointestinal anomalies	15	-	4	4	2	3	1	1	-	-
Malformed genitalia	17	-	4	5	-	5	-	3	-	-
Renal agenesis	5	-	1	1	2	1	-	-	-	-
Other urogenital anomalies	44	-	12	4	12	14	-	2	-	-
Cleft lip/Palate	46	-	7	16	14	5	3	1	-	-
Polydactyly/Syndactyly/Adactyly	55	1	19	14	12	7	1	1	-	-
Club foot	28	1	6	6	8	4	2	1	-	-
Diaphragmatic hernia	5	-	1	1	2	1	-	-	-	-
Other musculoskeletal/integumental anomalies	73	-	11	29	18	12	1	2	-	-
Down's syndrome	22	-	2	4	4	4	2	6	-	-
Other chromosomal anomalies	21	-	2	8	3	5	1	2	-	-
Other congenital anomalies	314	7	54	87	90	54	18	4	-	-

*This is not an unduplicated count. More than one congenital anomaly was noted on some birth certificates. 694 infants had at least one congenital anomaly.

DELIVERY CHARACTERISTICS: MEDICAL PROCEDURES, COMPLICATIONS, AND FACILITIES

Obstetric Procedures

The attendant at birth records obstetric procedures on the birth certificate by checking any of 6 procedures performed, none, or other. More than one procedure can be recorded on a birth certificate. In 1996 there were 98 birth certificates for which obstetric procedure was unknown.

- **The most frequently performed obstetric procedure in 1996 was electronic fetal monitoring**, at a rate of 764.1 per 1,000 live births (Table B34).
 - **Electronic fetal monitoring was done less often in African-American mothers than in white mothers**, at a rate of 710.9 per live births versus 804.1 per 1,000 live births, respectively (Table B34).
- **The second most frequently performed procedure was ultrasound** at a rate of 619.7 per 1,000 live births (Table B34).
 - **Ultrasound was done less often in African-American mothers than in white mothers**, at a rate of 541.3 per 1,000 live births versus 673.0 per 1,000 live births, respectively (Table B34).
- There were 7,401 births with no reported associated obstetric procedures performed.
 - **African-American mothers were more than twice as likely to have no obstetric procedures performed than white mothers**, at a rate of 170.6 per 1,000 live births versus 72.3 per 1,000 live births, respectively (Table B34).

**Table B34. Counts and Rates* of Obstetric Procedures by Maternal Age and Race
Louisiana, 1996**

Procedure	All Ages						All Races**			
	White		Black		All Races**		Teens		35 & Older	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
None	2691	72.3	4522	170.6	7401	113.5	1639	133.2	786	139.1
Electronic fetal monitoring	29942	804.1	18842	710.9	49809	764.1	9275	753.5	4121	729.5
Ultrasound	25061	673.0	14347	541.3	40399	619.7	7289	592.2	3476	615.3
Stimulation of labor	5046	135.5	2759	104.1	7957	122.1	1525	123.9	628	111.2
Induction of labor	4807	129.1	2221	83.8	7151	109.7	1257	102.1	540	95.6
Amniocentesis	369	9.9	211	8.0	597	9.2	70	5.7	203	35.9
Tocolysis	337	9.1	235	8.9	580	8.9	133	10.8	41	7.3

*Rate per 1,000 live births

**"All Races" includes white, black, and other

Table B35 gives detailed counts of obstetric procedures reported for 1996 births, categorized by maternal age and race.

**Table B35. Counts* of Obstetric Procedures by Maternal Age and Race
Louisiana, 1996**

Procedure	Race	Maternal Age Group														
		Total	Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
None	All	7401	67	118	223	340	434	458	1573	1988	1633	1353	663	118	5	1
	White	2691	6	17	31	61	89	105	303	584	722	713	303	59	-	1
	Black	4522	60	99	190	276	342	347	1254	1371	856	593	328	57	3	-
	Other	188	1	2	2	3	3	6	16	33	55	47	32	2	2	-
Amniocentesis	All	597	3	4	9	15	13	26	67	118	106	100	156	47	-	-
	White	369	-	-	4	4	6	9	23	54	71	72	116	33	-	-
	Black	211	3	4	5	11	7	17	44	62	30	27	34	11	-	-
	Other	17	-	-	-	-	-	-	-	2	5	1	6	3	-	-
Electronic fetal monitoring	All	49809	270	547	1111	1758	2429	3160	9005	14708	13009	8693	3477	627	17	3
	White	29942	49	157	411	776	1180	1536	4060	7989	8982	6131	2325	397	7	2
	Black	18842	220	382	689	965	1217	1587	4840	6491	3704	2340	1028	210	8	1
	Other	1025	1	8	11	17	32	37	105	228	323	222	124	20	2	-
Induction of labor	All	7151	21	59	126	265	336	450	1236	2244	1925	1184	444	93	3	1
	White	4807	6	21	61	143	185	267	677	1442	1443	867	306	64	2	-
	Black	2221	15	38	65	121	144	179	547	772	444	291	123	27	1	1
	Other	123	-	-	-	1	7	4	12	30	38	26	15	2	-	-
Stimulation of labor	All	7957	40	95	174	261	412	543	1485	2407	2059	1338	527	101	-	-
	White	5046	4	25	65	121	243	295	749	1395	1497	973	358	70	-	-
	Black	2759	36	66	106	137	162	243	714	966	524	333	157	29	-	-
	Other	152	-	4	3	3	7	5	22	46	38	32	12	2	-	-
Tocolysis	All	580	4	8	14	25	40	42	129	179	138	89	34	7	-	-
	White	337	1	2	6	5	20	23	56	104	103	53	16	4	-	-
	Black	235	3	6	8	20	19	19	72	73	33	35	16	3	-	-
	Other	8	-	-	-	-	1	-	1	2	2	1	2	-	-	-
Ultrasound	All	40399	198	409	860	1376	1975	2471	7091	11848	10628	7155	2936	524	16	3
	White	25061	46	129	365	658	1010	1277	3439	6712	7396	5083	2026	349	8	2
	Black	14347	150	272	484	701	930	1156	3543	4899	2944	1855	794	155	6	1
	Other	991	2	8	11	17	35	38	109	237	288	217	116	20	2	-
Other	All	1572	14	32	56	64	96	100	348	470	365	235	111	26	3	-
	White	531	1	2	14	14	11	18	59	129	181	105	46	9	1	-
	Black	1024	13	30	42	50	84	81	287	340	179	124	63	17	1	-
	Other	17	-	-	-	-	1	1	2	1	5	6	2	-	1	-
Unknown	All	98	2	1	1	4	6	6	18	20	11	22	12	11	-	2
	White	60	-	1	-	4	2	-	7	13	7	16	9	8	-	-
	Black	34	2	-	1	-	4	4	9	7	3	5	3	3	-	2
	Other	4	-	-	-	-	-	2	2	-	1	1	-	-	-	-

*This is not an unduplicated count. More than one procedure was noted on some birth certificates.
64308 women had 1 or more live births during the calendar year.

Complications of Labor and/or Delivery

Complications of labor and/or delivery are recorded on the birth certificate by checking any of 15 listed complications, none, or other. More than one complication can be recorded on a birth certificate. In 1996, There were 102 birth certificates for which this section was left blank.

- **The three most commonly reported complications of labor and/or delivery in 1996 were moderate or heavy meconium** (42.1 per 1,000 live births), **fetal distress** (31.2), and **cephalopelvic disproportion** (29.0) (Table B36).
- **Rates varied considerably by race. The rates of moderate or heavy meconium and fetal distress were higher for African-American women** (56.6 and 40.3 per 1,000 live births, respectively) **than for white women** (32.2 and 25.2, respectively), while **the rate of cephalopelvic disproportion was higher for white women** (34.2) **than for African-American women** (21.8) (Table B36).
- There were 47,533 birth certificates with no complication of labor and/or delivery noted. **White mothers more frequently reported no complications than African-American mothers did**, with a rate of 738.2 per 1,000 live births versus 714.0 per 1,000 live births, respectively (Table B36).

Table B36. Counts and Rates* of Complications of Labor and/or Delivery by Maternal Race and Age Louisiana, 1996

Complication	All Ages						All Races**			
	All Races**		White		Black		Teens		35 & Older	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
No complication noted	47533	729.2	27488	738.2	18923	714.0	8964	728.2	4075	721.4
Meconium, moderate/heavy	2742	42.1	1199	32.2	1500	56.6	595	48.3	245	43.4
Fetal distress	2032	31.2	937	25.2	1067	40.3	424	34.4	190	33.6
Cephalopelvic disproportion	1893	29.0	1273	34.2	578	21.8	344	27.9	117	20.7
Breech/Malpresentation	1651	25.3	1123	30.2	492	18.6	238	19.3	174	30.8
Premature rupture of membrane (>12 hrs)	972	14.9	579	15.5	373	14.1	188	15.3	84	14.9
Febrile (> 100 degrees F)	892	13.7	535	14.4	345	13.0	218	17.7	53	9.4
Dysfunctional labor	732	11.2	436	11.7	287	10.8	176	14.3	47	8.3
Precipitous labor (<3 hrs)	597	9.2	230	6.2	346	13.1	96	7.8	52	9.2
Abruptio placenta	285	4.4	141	3.8	138	5.2	52	4.2	26	4.6
Prolonged labor (>20 hrs)	236	3.6	120	3.2	107	4.0	62	5.0	16	-
Placenta previa	160	2.5	93	2.5	65	2.5	13	-	20	3.5
Other excessive bleeding	116	1.8	68	1.8	42	1.6	25	2.0	11	-
Cord prolapse	109	1.7	61	1.6	47	1.8	19	-	10	-
Anesthetic complications	30	0.5	18	-	12	-	7	-	4	-
Seizures during Labor	20	0.3	6	-	14	-	5	-	1	-

*Rate per 1,000 live births

**"All Races" includes white, black, and other.

“-“ indicates rate is unstable due to low frequency

Table B37 gives detailed counts of labor and delivery complications reported for 1996 births, categorized by maternal age and race.

**Table B37. Counts* of Complications of Labor and/or Delivery, by Maternal Age and Race
Louisiana, 1996**

Complication	Race	Total	Maternal Age Group													
			Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
No complication noted	All	47533	262	554	1103	1729	2369	2947	8702	13989	12080	8421	3459	597	19	4
	White	27488	45	144	405	705	1066	1338	3658	7297	8074	5766	2268	372	5	3
	Black	18923	214	403	685	1005	1276	1567	4936	6433	3670	2401	1053	205	10	1
	Other	1122	3	7	13	19	27	42	108	259	336	254	138	20	4	-
Febrile (> 100 degrees F)	All	892	6	7	21	41	56	87	212	261	232	128	46	7	-	-
	White	535	-	1	5	18	16	39	79	153	177	92	30	4	-	-
	Black	345	6	6	16	23	40	46	131	105	51	34	15	3	-	-
	Other	12	-	-	-	-	-	2	2	3	4	2	1	-	-	-
Meconium, moderate/heavy	All	2742	28	49	70	109	141	198	567	805	647	450	203	40	2	-
	White	1199	6	10	15	34	45	69	173	320	350	253	81	14	2	-
	Black	1500	22	39	55	75	95	129	393	473	283	187	116	26	-	-
	Other	43	-	-	-	-	1	-	1	12	14	10	6	-	-	-
Premature rupture of membrane (>12 hours)	All	972	4	8	20	31	54	71	184	264	268	168	69	15	-	-
	White	579	1	2	9	17	20	41	89	139	180	115	44	11	-	-
	Black	373	3	5	11	14	33	30	93	117	82	50	24	4	-	-
	Other	20	-	1	-	-	1	-	2	8	6	3	1	-	-	-
Abruptio placenta	All	285	-	-	7	9	14	22	52	90	72	45	22	3	1	-
	White	141	-	-	2	5	7	8	22	34	40	30	11	3	1	-
	Black	138	-	-	5	4	7	14	30	53	31	14	10	-	-	-
	Other	6	-	-	-	-	-	-	-	3	1	1	1	-	-	-
Placenta previa	All	160	-	1	1	2	2	7	13	38	45	44	16	4	-	-
	White	93	-	-	-	-	-	5	5	15	31	28	12	2	-	-
	Black	65	-	1	1	2	2	2	8	23	13	16	4	1	-	-
	Other	2	-	-	-	-	-	-	-	-	1	-	-	1	-	-
Other excessive bleeding	All	116	2	1	1	8	8	5	23	35	31	14	10	1	-	-
	White	68	1	1	-	4	3	3	11	18	23	10	5	-	-	-
	Black	42	1	-	1	4	5	2	12	17	5	4	2	1	-	-
	Other	6	-	-	-	-	-	-	-	-	3	-	3	-	-	-
Seizures during labor	All	20	-	-	1	3	-	1	5	8	4	2	1	-	-	-
	White	6	-	-	-	1	-	-	1	1	3	1	-	-	-	-
	Black	14	-	-	1	2	-	1	4	7	1	1	1	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Precipitous labor (< 3 hours)	All	597	1	5	15	16	27	32	95	183	145	121	43	9	-	-
	White	230	-	1	2	3	8	14	28	56	62	61	17	6	-	-
	Black	346	1	3	13	12	19	18	65	125	76	51	26	2	-	-
	Other	21	-	1	-	1	-	-	2	2	7	9	-	1	-	-
Prolonged labor (> 20 hours)	All	236	1	4	9	18	19	11	61	72	56	30	13	3	-	-
	White	120	-	2	1	6	11	6	26	30	32	21	10	1	-	-
	Black	107	1	2	8	11	8	5	34	39	21	9	2	1	-	-
	Other	9	-	-	-	1	-	-	1	3	3	-	1	1	-	-
Dysfunctional labor	All	732	5	14	23	34	52	48	171	212	191	106	39	8	-	-
	White	436	1	6	6	15	26	27	80	118	139	72	22	4	-	-
	Black	287	4	7	17	18	26	20	88	93	50	33	15	4	-	-
	Other	9	-	1	-	1	-	1	3	1	2	1	2	-	-	-
Breech/Malpresentation	All	1651	7	16	19	49	70	77	231	423	488	327	141	31	2	1
	White	1123	1	6	4	28	40	44	122	257	362	258	101	19	2	1
	Black	492	6	10	15	20	28	32	105	160	112	63	34	12	-	-
	Other	36	-	-	-	1	2	1	4	6	14	6	6	-	-	-

*This is not an unduplicated count. More than one complication was noted on some birth certificates. 64308 Women had 1 or more live births during the calendar year.

(Table continues on the next page)

Table B37 (continued). Counts* of Complications of Labor and/or Delivery, by Maternal Age and Race Louisiana, 1996																
Complication	Race	Total	Maternal Age Group													
			Under 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45 & Older	Unk.
Cephalopelvic disproportion	All	1893	16	15	43	54	83	133	328	540	518	374	100	16	1	-
	White	1273	5	5	16	26	52	71	170	354	384	272	72	16	-	-
	Black	578	11	10	25	27	29	60	151	179	118	96	23	-	-	-
	Other	42	-	-	2	1	2	2	7	7	16	6	5	-	1	-
Cord prolapse	All	109	-	1	3	1	6	8	19	28	27	25	7	3	-	-
	White	61	-	-	-	1	1	7	9	16	16	17	3	-	-	-
	Black	47	-	1	3	-	5	1	10	12	11	7	4	3	-	-
	Other	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Anesthetic complications	All	30	-	-	1	1	2	3	7	5	11	3	4	-	-	-
	White	18	-	-	-	-	-	2	2	3	7	3	3	-	-	-
	Black	12	-	-	1	1	2	1	5	2	4	-	1	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fetal distress	All	2032	17	27	53	76	128	123	407	611	458	349	151	37	2	-
	White	937	2	6	11	30	48	51	146	265	230	204	70	19	1	-
	Black	1067	15	21	42	46	80	71	260	339	225	138	71	18	1	-
	Other	28	-	-	-	-	-	1	1	7	3	7	10	-	-	-
Other	All	8150	48	90	199	297	420	515	1521	2349	2047	1442	626	116	1	-
	White	4301	7	20	61	98	157	222	558	1109	1256	936	368	67	-	-
	Black	3708	41	68	137	196	253	290	944	1212	749	474	243	44	1	-
	Other	141	-	2	1	3	10	3	19	28	42	32	15	5	-	-
Unknown	All	102	-	1	2	5	5	7	20	15	21	22	11	11	-	2
	White	71	-	1	2	3	2	1	9	13	17	14	9	9	-	-
	Black	26	-	-	-	2	2	4	8	2	3	7	2	2	-	2
	Other	5	-	-	-	-	1	2	3	-	1	1	-	-	-	-

*This is not an unduplicated count. More than one complication was noted on some birth certificates.
64308 Women had 1 or more live births during the calendar year.

Method of Delivery

- In 1996 26.4% of all live births in Louisiana were cesarean deliveries (Table B38), compared with 20.6% for the United States.
- Preliminary 1996 data collected by the National Center for Health Statistics report that Louisiana had the second highest rate of cesarean deliveries in the country.
- Cesarean deliveries occurred more frequently among white women than among African-American women, at 27.9% versus 24.6% of live births, respectively (Figure B15, Table B38).
- Use of cesarean deliveries increased with age; white women aged 40 and older had the highest use, at 37.4% of live births (Figure B15, Table B38).

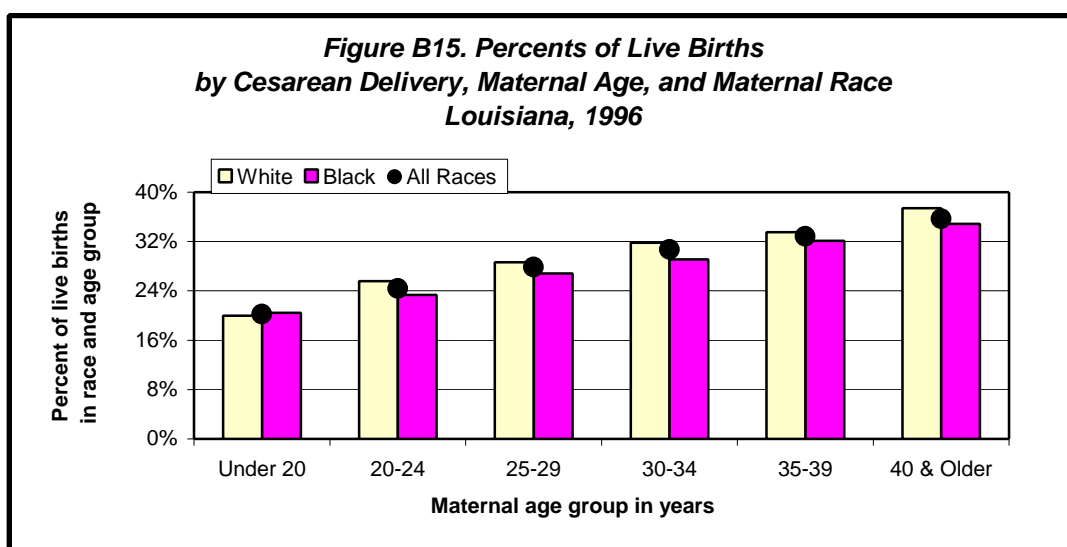


Table B38. Percents of Live Births by Cesarean Delivery, Maternal Age, and Maternal Race Louisiana, 1996							
Race	Maternal Age Group						All Ages
	Under 20	20-24	25-29	30-34	35-39	40 & Older	
White	20.0	25.6	28.7	31.8	33.5	37.4	27.9
Black	20.4	23.3	26.8	29.1	32.1	34.9	24.6
All Races*	20.2	24.4	27.9	30.7	32.8	35.7	26.4

*"All Races" includes white, black, and other

Table B39 gives detailed counts of methods of delivery by race and age group among the 64,308 Louisiana residents who gave birth in 1996.

Table B39. Counts* of Method of Delivery by Maternal Age and Maternal Race
Louisiana, 1996

Method	Race	Total	Maternal Age Group													
			LT 15	15	16	17	18	19	15-19	20-24	25-29	30-34	35-39	40-44	45+	Unk.
Vaginal	All	40734	269	513	1039	1608	2202	2710	8072	12231	10145	6768	2755	477	14	3
	White	22064	46	127	355	638	908	1159	3187	5937	6446	4457	1713	271	5	2
	Black	17665	221	378	671	956	1263	1511	4779	6062	3398	2082	930	186	6	1
	Other	1005	2	8	13	14	31	40	106	232	301	229	112	20	3	-
Vaginal / Forceps	All	3384	21	50	97	127	220	245	739	982	901	538	176	26	1	-
	White	2461	5	16	47	64	143	174	444	697	736	425	135	19	-	-
	Black	867	16	34	50	60	76	70	290	274	145	100	36	6	-	-
	Other	56	-	-	-	3	1	1	5	11	20	13	5	1	1	-
Vaginal / Forceps & Vacuum	All	98	1	2	3	6	4	5	20	26	29	13	3	6	-	-
	White	69	-	-	1	4	2	2	9	17	25	10	2	6	-	-
	Black	26	1	2	2	2	2	3	11	7	4	2	1	-	-	-
	Other	3	-	-	-	-	-	-	-	2	-	1	-	-	-	-
Vaginal / Vacuum	All	1539	8	21	54	74	81	104	334	488	370	237	87	15	-	-
	White	983	3	7	23	39	46	51	166	314	262	169	56	13	-	-
	Black	519	4	14	31	34	34	52	165	162	98	63	26	1	-	-
	Other	37	1	-	-	1	1	1	3	12	10	5	5	1	-	-
Vaginal birth after previous c-section	All	887	1	1	3	11	17	38	70	269	240	213	83	11	-	-
	White	454	-	-	-	-	5	12	17	107	140	131	52	7	-	-
	Black	415	1	1	3	11	12	26	53	161	88	80	28	4	-	-
	Other	18	-	-	-	-	-	-	-	1	12	2	3	-	-	-
Vaginal birth after previous c-section / Forceps	All	75	-	-	-	2	1	1	4	19	28	15	7	2	-	-
	White	53	-	-	-	1	-	1	2	15	21	10	4	1	-	-
	Black	20	-	-	-	1	1	-	2	4	7	3	3	1	-	-
	Other	2	-	-	-	-	-	-	-	-	-	2	-	-	-	-
Vaginal birth after previous c-section / Forceps / Vacuum	All	5	-	-	-	-	-	-	-	1	1	2	1	-	-	-
	White	4	-	-	-	-	-	-	-	1	1	1	1	-	-	-
	Black	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vaginal birth after previous c-section / Vacuum	All	48	-	-	-	1	1	-	2	16	13	14	2	1	-	-
	White	29	-	-	-	-	-	-	-	11	7	9	2	-	-	-
	Black	19	-	-	-	1	1	-	2	5	6	5	-	1	-	-
	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Primary c-section	All	9947	64	129	251	418	556	674	2028	2814	2534	1635	708	152	10	2
	White	5842	11	31	77	165	263	330	866	1614	1722	1103	422	98	4	2
	Black	3926	53	95	171	250	285	336	1137	1166	758	500	257	50	5	-
	Other	179	-	3	3	3	8	8	25	34	54	32	29	4	1	-
Repeat c-section	All	6726	2	3	16	43	77	194	333	1693	1964	1789	802	142	1	-
	White	4234	-	-	2	8	18	79	107	828	1341	1306	561	91	-	-
	Black	2384	2	3	14	35	59	114	225	843	589	450	223	51	1	-
	Other	108	-	-	-	-	-	1	1	22	34	33	18	-	-	-
Unknown	All	865	8	24	26	53	66	57	226	244	181	136	49	19	-	2
	White	544	-	9	8	25	40	28	110	156	133	96	36	13	-	-
	Black	294	8	15	18	26	25	26	110	80	42	34	13	5	-	2
	Other	27	-	-	-	2	1	3	6	8	6	6	-	1	-	-

*64308 women had 1 or more live births during the calendar year.

Attendant at Birth

The vast majority of births in Louisiana in 1996 took place in hospitals and were attended by physicians. There were no racial differences in either of these delivery characteristics (Tables B40 and B41).

Table B40. Counts and Percents of Birthing Facilities by Maternal Race Louisiana, 1996						
Birthing Facility	White		Black		All Races*	
	Number	Percent	Number	Percent	Number	Percent
In Hospital	37536	99.6	26160	99.5	65150	99.5
Out of Hospital	158	0.4	141	0.5	307	0.5

*"All Races" includes white, black, and other

Table B41. Counts and Percents of Birth Attendants by Maternal Race Louisiana, 1996						
Birth Attendant	White		Black		All Races**	
	Number	Percent	Number	Percent	Number	Percent
Physician	36898	99.1	26184	98.8	64505	99.0
Midwife	242	0.6	191	0.7	453	0.7
Other*	96	0.3	128	0.5	228	0.3

*Includes unclassifiable birth attendant data

**"All Races" includes white, black, and other